THE NEWSPAPER FOR IT LEADERS . WAW COMPUTERWOOD, O CO. DECEMBER 2, 2002 - VOL 36 - NO 40 - SE/COP

Automaker Goes 'Digital'

DaimlerChrysler uses IT to design plants, cut car production cycles

BY THOMAS HOFFMAN

DaimlerChrysler AG is in the early stages of automating the way its manufacturing plants are designed, a project that will require an eight- to ninefigure investment and is

aimed at reducing the company's new-vehicle productioo cycles by up to 30%. The world's third-largest automaker announced its Dig-

ital Factory plans at a briefing here last week. The initiative is an attempt to simulate the entire production process from initial drawings of facilities to final functioning asbrick is out in the ground." said Susan J. Unger, CIO at DaimlerChrysler

As part of the project, DaimlerChrysler expects to use manufacturing design, simula-tion and visualization tools developed by Dassault Systemes SA to help design, build and retrofit all of its plants by 2005,



Web Apps Become New Weakest Security Link

Experts say threat model changing as backers look to use open ports to access corporate data

BY DAN VESTON The defensive perimeter of firewalls and intrusion-detection systems that most companies rely on for network secu rity is being bypassed

by hackers who have made Web applications their newest targets, security experts warned last week application is becoming the

"Perimeter defense is becoming an irrelevant term," said Kevin Soo Hoo, senior security architect at Cambridge, Mass.based security consultancy @Stake Inc. "The emphasis (in hackingl is now shifting to the application layer. The Web

ry vehicle for attack." The increased demand for Web functionality has pushed almost all traffic through Ports 80 and 443 on most Web servers - typically the only two ports that are left open by most companies. And that's where hackers are turning to gain access to enterprise networks and data, said Soo Hoo. "As a result, the threat model

is changing. It makes the firewall no longer the line of de-Web Security, pose 16

WebSphere 5 Finally Ships IBM catches up to BEA

with J2EE L3 support; no user rush to upgrade

IBM caught up to its cor tition last week with the delayed release of a new version of its WebSphere application server that features support for Web services technologi and the latest version of lava 2 Enterprise Edition.

But the delay isn't expected to bother IT shops that are alreazy using WebSphere. When IBM smnounced Version 5 in May several cusers said they were still usine Version 3.5 and were in no great hurry to jump to Webhere 5.0 because of the time and testing required to move mission-critical applications to a new platform [QuickLink

296711 *Customers are still trying to digest the last release they got," said Susan Aldrich, an analyst at Boston-based Patri-WebSphere, page 16





budget. STARTS ON PAGE 27.

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Porsche has a 420-hp, water-cooled,



Presenting Xserve, one of the fastest 1U servers on Earth. Featuring the exceptional performance of dual 1 GHz PowerPC G4 processors, each with

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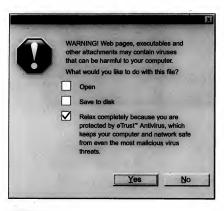
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64-bit, 66MHz), software RAID mirroring and striping, a VGA graphics card, two USB ports and a









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Who Moved My IT Job? In the Management section: IT business users are

picking up more of the work that was previously done strictly by IT workers. On the flip side, traditional IT jobs, such as database analyst and computer programmer, include business value skills and project management responsibilities. Page 49



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QuickStudy: DMCA

In the Technology section: The Digital Millennium Copyright Act extends copyright protection to digital content. The law is also stirring controversy, with some claiming that it impinges on consumers' right to fair use and impedes some kinds of scientific research, Page 41

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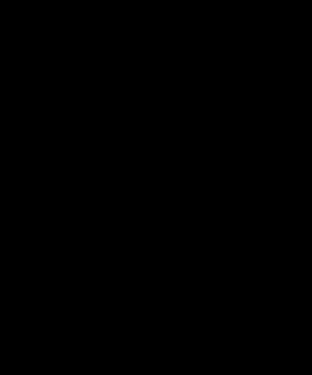


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with Sheith Omar Balori
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of impending cyberattacks against Western targets. Quicklish a2710

Storage Bookshelf KNOWLEDGE CENTER: Check out this excerpt

from Practical Storage Area Networking, a new book by Daniel Pollack, a systems administrator at America Online. Quicklant 34001

Gadgets Galore KNOWLEDGE CENTER: If you love portable

electronic toys, you'll want to see this report from the Nokia Mobile Internet Conference. Quicklink a2750

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Microsoft Changes Small-User Policies Microsoft Corp. said it plans to nelly its authors from

olicies for companies with up to 00 PCs by allowing them to spread out payments over three years. That would free qualifying users from having to pay the up-front fees Microsoft charges as part of the License 6.0 Scens plan It implemented in July. The medified small-business pro-gram, called Open Value, is due to be launched early next year.

WorldCom Settles **Accounting Charges**

WorldCom Inc. said it has agree dorition made by the U.S. Hies and Exchange Comtion as part of a civil lawsuit its the deal, WorldCom said the SEC could still seek to impose financial penelties agains the bankrupt company. World-Com didn't admit any wrongdoing but agreed to make inter-nal financial reporting charges.

Genuity to Sell Assets to Level 3

ulty Inc., a Wobern, Mess. hat ran into financial troubles last summer, said it has agreed to sell most of its assets to Level 3 Communications live, for up to \$242 million, Broomfold, Cole-based Level 3 plans to operate tion estale-bases a as vilus and on managed P service

Amdocs Plans 4% Workforce Cutback

Amdocs Ltd., which develops said it plans to lay off 400 of it's 8,000 employees. The cut-backs follow a SO million not loss during the Chesterfield, Mo. -

AT DEADLINE | Dell Takes a Swipe at IBM, **HP With New Blade Servers**

Comes in below top rivals on pricing. but management tools a potential issue

Corp. last week an-ELL COMPUTER nounced that it has started shipping a line of blade servers priced to undercut similar products siready on the market from vendors such as IBM and

Hewlett-Packard Co. Dell said its PowerEdge 1655MC blade server starts as \$1,499 with a single Pentium III processor, putting the cost of the device several bundred dollars below what IBM and HP charge for their entry-level models (see chart). Dell is also selling a system chassis for less money, although it holds far fewer blade servers than

the ones sold by IBM and HP Blade servers pack the functionality of traditional rackmounted systems onto highdensity boards. Framingham, Mass-based IDC estimates that sales of the space-saving servers will total about \$120 million this year as top vendoes start to ship devices. Russ Ray, senior product

manager for Dell's PowerEdge server line, claimed that Dell's pricing will give it a competitive edge when users factor

> into their buying decisions. Increasing Competition Dell's blade servers aren't the lowest-priced ones on the market. RLX Technology Inc., a start-up in The Wood lands, Texas, sells an entrylevel model for \$1,249, plus \$1.200 for a 24-slot chassis But Glenn Ricart, chief tech-

nology officer at CenterBeam Inc., an IT outsourcing vendor in Santa Clara, Calif., said Dell's entry into the blade server market should increase competition and "drive quality up and prices down." CenterBeam uses HP's blade servers to shadow sys-

tems it has installed at custooser sites with a mirror image of all their applications and files. Ricart said Center-Beam embraced the emerging technology because blades are less expensive and easier to

ventional rack-mounted systems, in part because of re-duced cabling needs.

David Freund, an analyst at Illuminata Inc. in Nash N.H., said Dell "has drawn a line in the sand' for IBM total cost of ownership (TCO) and HP with its pricing. But while Dell has commoditized products such as PCs and Windows-based servers to its competitive advantage. Freund questioned whether it can ave the same success with

blade servers. Hardware costs are just a small slice of TCO for blade servers, Freund said, adding

Blade Server Pricing Pricing for entry level bis

DELL \$1,499 with a 1,26 Offic Positions III. plos \$1,789 for a six-sist change. m HP \$1,750 with an 800-MHz

ISM \$1,879 with a 2-0Hz

that the devices also require an extensive suite of management tools to handle funct such as load balancing. That could become a key differen-

tiator for IBM and HP, he said Although Deli offers software to help manage server loads. Freund said he thinks users will also need to buy third-party tools from vendors such as Altiris Inc. in Lindon. Utah, to maximize the potential of Dell's blade servers. Tim Dougherty, director

of blade strategy for IBM's server group, said the com-pany's IBM Director software. which includes automated setup and configuration wizards, gives it a competitive advantage over Dell's technology. Hugh Jenkins, vice president of marketing for HP's in-dustry-standard server group, HP's blade product line, which

emphasized the breadth of is due to be expanded next year to include four-processor servers and models based on Intel Corp.'s Xeon chip. Dell also introduced a dusi CPU version of the 1655MC. Both models support Windows 2000 and Red Hat Linux. the company said. P

SBC, Sprint Beef Up Network Services

SBC Communications Inc. and Sprint Corp. last week made arate announcements of enhanced network services for corporate users

Both companies are competing for networking customers, but Sprint's services are primarily nationwide. whereas SBC mainly serves 13 Southwestern states

As a regional Bell operating any, San Antonio-based

the local-loop and lone-distance voice and data services that aren't always available from national carriers such as Sprint, an SBC spokesman said. The announcement makes SBC's frame-relay. Asynchronous Transfer Mode

and private-line services regionwide offering Also last week, SBC apnounced that Braum's Ice Cream and Dairy Stores in Okoma City is expected to go live with SBC broadband connections to its 300 shops early next year. "We were a good fit with SBC because our core states are within their core states," said Paul Clark, Braum's CIO

Braum's needed efficient connections for its intra and e-mail systems, and for transferring data in its custom point-of-sale and invento pent apolicati Clark said. Some of the stores will be connected by 56K bit/ sec. frame-relay ports, and others will have Digital Subscriber Line (DSL) or enhanced DSL with speeds up to 384K bit/sec. SBC was chosen over several large service pro-viders a year ago, Clark said.

Meanwhile, Sprint officially announced the managed network services that it began slowly rolling out in the sprin It now has 20 business custo mers, a spokesman said. The service includes the ability to monitor any LAN server or application, according to Sprint officials.

The service gives Sprint the ability to monitor traffic over competing providers' networks as a means of keeping customers' networking costs down, said David Willis, an analyst at Meta Group Inc. in Stamford, Conn.

"It's a somewhat enlightened offering and makes the more carrier-neutral," he said. WE'VE BENCHMARKED YOUR WEB SITE

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ATT YES

Sun Posts Code for Intel-Based OS Sun Microsystems Inc. rele

an early version of its Solaris 9 operating system for servers ed on Intel Corp.'s proc sors and said commercial ship-ments of the software will start this month. The initial code can reloaded from Sun'a Web alls for \$20, the company said m had stopped work on the sary, but R reversed that on after users complained

And Warns About Solaris Flaw

is another Solaris-related mat ter, Son confirmed that the open sting system's X Window Font Carolina commencent have a building overflow flow that could be used to run malicious code or launch denial of service attacks. Son said it's developing patches for Solaris 9 and earlier releases ing back to Solaris 2.5.1. The volumeability was first reported by the CERT Coordination Center at Correspis Melion University in Pittalangh and internet Security

KLM, Accenture

Team on Web Apps otherlands-based KLM Royal sich Airlinus and Accenture List, said they have account to move forward with a six-year deal to set up a jointly staffed were war war develop Java-bases Web applications for IG.M. The approximant follows a test phase that began earlier this year. The new operation, called UniT, will have 60 employees and will be 60 compleyons and will be upod for IQM by Accommo The companies said that more than 20 internet and intranet development projects are planned.

FedEx Readies Rollout Of Wireless Handheld

Wireless Services Inc.'s na-

FedEx in March disclosed

deal to use the General Packet

that it had signed a five-year

Radio Service (GPRS) net-

work operated by Redmond

Wash-based AT&T Wireless

The PowerPad will also in-

clude support for Bluetooth

nications so that couriers can

tooth-equipped laser printers.

short-range wireless con

[QuickLink 28293].

Pasley said the \$150

million investment

Pocket PC-based hardware expected to save \$20M in annual costs for courier

LEDEX CORP in February plans to start deploving new custombuilt handheld devices to its 40,000 FedFy Express couriers as part of a \$150 million investment that the com-

pany expects to yield savings of about \$20 million per year Memphis-based FedEx last

covers the contracts with both week said that it has selected Motorola and AT&T Wireless. Motorola Inc. to develop and manufacture the FedEx PowerPad handhelds, which will use Microsoft Corp.'s Pocket PC operating system and autoprint shipping labels on Bluemate courier dispatch, pickup and delivery operations. Ken Pasley, director of wire-In addition, the new device will feature a bar code scanner less systems development at for reading package labels. FedEx, described the Power-Pasley said that FedEx also Pad as an "industrial-strength" version of commercial Pocket PC hardware. He added that the bulk of the expected cost savinus will result from the climination of paperwork now

done by the couriers at FedEx Express, the company's flag-\$3M project will ship package-delivery service. The couriers pick up and deliver a total of 3.5 mi packages per day, and Power-Pad is designed to save 10 secis at each stop. Pasley said.

FedEx is now testing the device and expects to complete the rollout over 18 months. The company's couriers. currently use a low-memory store-and-forward device called the Super Tracker that

FedEx also developed with belp from Schaumburg, Ill.-Unlike the Super Tracker. the PowerPad will be able to

exchange data with FedEx's back end systems, including its Webtracking application, over AT&T

Barry Craver, Old Dominion's senior spolication deval opment manager. Once en route dri-

802.11b wireless LAN capabilities into the PowerPad as soon as possible. That technology is widely used in FedEx's delivtionwide mobile data network. ery hubs to scan packages.

Craig Mathias, an analyst at Farpoint Group in Ashland. Mass. said FedEx could gain "a psychic victory" by rolling out its new handheld technol ogy ahead of a similar move that's planned by rival United Parcel Service Inc.

Susan Rosenberg, a spokes woman for Atlanta-based UPS. said the company will release details on its new driver terminal next quarter, adding that the device "will incorpo rate definite physical and technology changes." In April, UPS said the handheld would be made by Symbol Technologies Inc. and run Microsoft's Windows CE operating system

wireless packet data network

operated by Motient Corp. in

Reston, Va. Craver said the

new handhelds from Holts-

reduce errors, increase pro

ductivity and make it easier

for customers to track their

shipments by feeding informa-

tion into the company's Web-

based tracking system.

ville, N.Y.-based Symbol

[QuickLink 28911]

Symbol also competed for the PowerPad contract, Mark Stanton, vice president of logistics marketing at Symbol, said the Holtsville, NY-based vendor continues to have business relationships with other ness resittousnaps with other divisions at FedEx, such as its FedEx Ground unit. 9

Reporter Linda Rosencrance contributed to this story.

Trucking Company Expects **Quick ROI From Handhelds**

equip 1,700 drivers

Old Dominion Freight Line Inc. said last week that it expects a return on investme within two years of its \$3 million rollout of Symbol Technologies Inc. wireless handheld computers and bor code scanners to its 1.700 drivers. The Thomasville, N.C.based trucking company loads

Old Dominion piloted the technology in August 2001 and started to roll out the system route information onto the - which wasn't announced Windows CF 3.0-based Symuntil last week - in February, bol handhelds before drivers Craver said. The company has so far deployed 600 handhelds leave on their routes, said and expects to equip the rest of its drivers next year.

> Improved Productivity Craver said Old Domi pects a 19- to 20-month ROI on the project. One unexpect-

ed benefit, he said, is that delvers have become more productive, going directly from one stop to another, probably because the system provides greater visibility into their

Old Dominion developed the driver application in-house using Embedded Visual Basic, Craver said, noting that the project took six mo The company uses mobile sys tems middleware from Aether stems Inc. in Owings Mills, Md_ as an interface between the drivers' wireless systems and Old Dominion's bost sys-

tems, said Craver FedEx Corp. and United Parcel Service Inc. have long used such wireless systems and handbeld computers to manage their operations. Nov smaller operations such as Old Dominion have started to embrace the technology because costs for such systems are decreasing, said Ken Dulancy, an analyst at Gartner Inc. in

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CA Plans Bundling Strategy to Broaden Portal Server Software

More tools will be added to CleverPath. but timing of full release uncertain

DOKING TO BOLSTER its position in the purtal software market. ↓ Computer Associates International Inc. next year plans to start bundling its CleverPath Portal application with cootent management, data smalusis and rules-based

automation tools. CA executives last week detailed plans to build those technologies into the portal and said some of the promised enhancements will become available in the coming

months. The company hopes to use the upwraded portal server to take on IT middleware vendors such as IBM, as well as developers of business intelligence software, said Ricardo Antuna, senior vice

president of CleverPath marketing at CA. But CA doesn't plan to demonstrate a complete ver-

sion of the expanded portal application to osces until its CA World conference in July.

He added that the company has yet to set a specific time frame for shipping the full release, which will include a mix of its own existing tools that have been specially integrated. When it's ready, the beefed-up software will include new sun port for managing the use of corporate documents as well as features such as the ability to set the software to trigger automated actions within anplications (see box).

Currently, companies that want to create that kind of portal infrastructure typically need to buy and then integrate the separate applications themselves, Antuna said. "We're trying to define a new way of doing this," he added. The delivery mechanism is the portal but all the modules need to belone together." A portal that's proactive and could automatically adjust to variables such as the rising and falling of financial markets sounds appealing to Bruce Focht, a business ana lyst at LP. Monran/American

Century Retirement Plan Services, a Kansas City, Mobased joint venture between LP. Morean Chase & Co.

and American Century Services Corp. Theoretically, Focht said. the financial services firm

build business rules into its systems. For example, he said, if the stock market were to drop by a certain amount, the portal software could send a message to J.P. Morgan/American Century's call center manavers telling them to expect an increase in phone calls from customers.

A Single Interface Ideally, the revamped product der to cut down on software training costs. Focht said, LP. Morgan/American Century uses Version 3.5 of CleverPath

will have a single interface for programming and usage in or-

NT to provide financial data to about 750 external end users. The company plans to upgrade to the latest release. Version 4.01, by year's end, according to Focht.

Although CA is keeping up with its rivals in the crowded portal business, it isn't a man ket leader, said Ray Valdes, an analyst at Gartner Inc. in Stamford, Conn. CA is ahead of many other vendors in moving to bundle its portal software with other applica-

tions, but it's not alone in doing that, he said Other companies taking similar steps include business

olication vendors SAP AG

and Pleasanton, Calif.-based PeopleSoft Inc., Valdes said. The bundling moves should put CA. SAP and PeopleSoft in position to use their portals to cross-sell their other software products to users, he added.

Baan Plots Turnaround Bid. **But New Losses Could Hurt**

ERP vendor plans ungrade next fall, yours to still support older apps

Baan Co. is preparing to launch marketing and software upgrade efforts in a bid to repair its tarnished image

with corporate users. But some customers and analysts said it's not clear whether the struggling business software vendor's strategy will work. Base, which pearly went out of business two years ago before it was bought by London-

based Invensys PLC, is trying to win new customers by focusing on the industrial manufacturing, electronics, automotive and aerospace industries. The company is also touting the planned rollout next fall of an applications upgrade that will support XML and Web services technology.

"The management team has spent the last month or so crystallizing our vision and strate-

ery. Now is the right time to roll that out " said Dave Wangler, senior vice president of global marketing at Baso, during a briefing held last month near company headquarters to

Barneveldt, Netherlands, However, Baan President Laurens van der Tang disclosed during the briefing that the Invenses unit fell back into the red last April after six straight profitable quarters and lost money for the sixmonth period that ended Sept. 30. He blamed the losses on

the "wrigusly depressed" state

of the IT market. His comments reignited

questions about Baan's viability less than two months after Inventor CEO Rick Haythornthwaite tried to ease the concerns of existing customers at a meeting in Los Angeles of the Baan World Disers (RWIT) group [QuickLink 33568]. Brian Zrimsek, an analyst at Stamford, Conn.-based Gart-

ner Inc., said he approves of Baan's new strategy. But, he added. *Rasn's challenge continues to be that of execution and the cloud of viability that still bangs over them." About 70% of Baan's customer base still uses its Baan

IV applications, not the most recent iBaan V release of the enterprise resource planning (ERP) software, Zrimsek said. He added that some users may see the upcoming launch of another upgrade as the ideal time to switch to another vendor, especially if they fear a

possible reduction in support for the Baan IV technology. Base is preparing to ente the Web services world with the next ERP release, which is code-named Gemini and is due for release in September Base officials said users will be able to access the software

through Web browsers and implement technologies such as XML and the Simple Object Access Protocol.

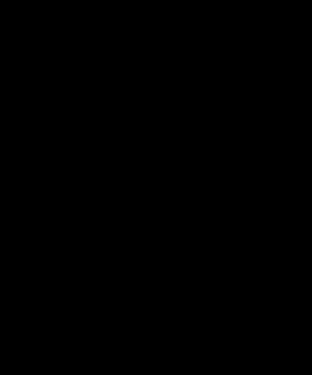
Despite the upgrade plans, Baan's management is "com mitted to support Baan IV for a lone time.* Waneler said. "We won't try to motivate

someone to upgrade with Ifears of lobsolescence." The Toronto-based BWU, which previously had plenty of questions about Baan's future, issued a statement saying that it's "looking forward" to

Gemini's release. But keeping its installed base happy will be a tough task for Baan, said Heath Tipton, chairman of the compa ny's user group in the U.K. and Ireland.

*Baan is now addressing one of the most difficult challenges facing software suppliers: harmonizing its installed user base across a controllable number of active software versions." Tieton said. Doing so. "is more difficult in the ERP market than in just about any other" because of the complexity and cost of application upgrades, he added.

Evers writes for the IDG News



CA Plans Bundling Strategy to Broaden Portal Server Software

More tools will be added to CleverPath. but timing of full release uncertain

OOKING TO BOLSTER its position in the portal software market, A Computer Associates International Inc. next year plans to start bundling its CleverPath Portal application with content management, data analysis and rules-based

ion tools. CA executives last week detailed plans to build those gies into the portal and said some of the promised enhancements will become

available in the comi s. The company hopes to use the upgraded portal server to take on IT middle. ware vendors such as IBM, as well as developers of business intelligence software, said Ricardo Antuna, senior vice president of CleverPath mar-

keting at CA. But CA doesn't plan to lemonstrate a complete ver-

sion of the expanded portal lication to users until its CA World conference in July,

He added that the comhas yet to set a specific time frame for shipping the full release, which will include a mix of its own existing tools that have been specially integrated. When it's ready, the beefed-up software will include new st port for managing the use of corporate documents as well as features such as the ability to set the software to trigger automated actions within applications (see box).

Currently, companies that want to create that kind of portal infrastructure typically need to buy and then integrate the separate applications themselves, Antuna said. "We're trying to define a new

way of doing this," he added. The delivery mechanism is the portal, but all the modules need to belong together." A portal that's proactive and could automatically adjust to variables such as the rising and falling of financial markets sounds appealing to Bruce Focht, a business and lyst at J.P. Morgan/American Century Retirement Plan Services, a Kansas City, Mo.based joint venture between J.P. Morgan Chase & Co.

and American Century Services Corp. Theoretically, Focht said. the financial services firm

drop by a certain amount, the portal software could send a message to LP. Morgan/American Century's call center manacers telling them to expect an increase in phone calls from customers.

A Single Interface

ideally, the revamped product will have a single interface for programming and usage in or-der to cut down on software training costs, Focht said. J.P. Morgan/American Cents uses Version 3.5 of CleverPath

build business rules into its

if the stock market were to

systems. For example, he said,

NT to provide financial data to about 750 external end users. The company plans to upgrade to the latest release. Version 4.01, by year's end, ac-cording to Focht.

Although CA is keeping up with its rivals in the crowde portal business, it isn't a man ket leader, said Ray Valdes, an analyst at Gartner Inc. is Stamford, Conn. CA is shead of many other vendors in

moving to bundle its portal software with other applications, but it's not alone in doing that, be said. Other com Other companies taking similar steps include business

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thwaite tried to ease the con-

cerns of existing customers at

of the IT market.

application vendors SAP AG and Pleasanton, Calif.-based PeopleSoft Inc., Valdes said. The bundling moves should

put CA, SAP and PeopleSoft in position to use their portals to cross-sell their other software products to users, he added. 9

Baan Plots Turnaround Bid. **But New Losses Could Hurt**

ERP vendor plans upgrade next fall, vows to still support older apps

Baan Co. is preparing to launch marketing and soft-ware upgrade efforts in a bid to repair its tarnished image with corporate users. But some customers and analysts

said it's not clear whether the struggling business software vendor's strategy will work. Baan, which nearly went out of business two years ago before it was bought by Londonbased Invensys PLC, is trying to win new customers by fo-cusing on the industrial manufacturing, electronics, automotive and acrospace industries.

The company is also touting the planned rollout next fall of an applications upgrade that will support XML and Web services technology. "The management team has spent the last month or so crystallizing our vision and strategy. Now is the right time to roll that out," said Dave Wan gler, senior vice president of global marketing at Basn, during a briefing held lest month near company headquarters in

Barneveidt, Netherlands. However, Baan President Laurens van der Tang disclosed during the briefing that the Invensys unit fell back into the red last April after six straight profitable quarters and lost money for the sixmonth period that ended Sept. 30. He blamed the losses on the "seriously depressed" state

a meeting in Los Angeles of the Baan World Users (BWU) group [QuickLink 33568]. Brian Zrimsek, an analyst at Stamford, Conn.-based Gart per Inc., said he approves of Baan's new strategy. But, he added, "Bean's challenge con tinues to be that of execution and the cloud of viability that still hangs over them." About 70% of Bean's cus-

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HELP DESK

11 12

HELP DESK

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BRIEFS CSC, UTC Add to

Outsourcing Deal
Computer Sciences Corp. said
Its 15-year IT outsourcing deal
with United Technologies Corp.
(UTC) was expanded to cover the
Asia-Pacific region, boosting the
contract's value by 3143 million
to a total of \$3.85 billion. CSC
laid off about 200 workers as-

signed to UTC in October. But a UTC spokesman said the cuts haven't affected service levels. Ford Expands Use of Vastera's Apps

Vastera Inc., a Delles, Va.-baord vander of global trade legistic. software, asid that it's taking over management of Ford Metor Co.* international shipping oprations in Europe. Vastera will run the operations via a bosted installation of its applications. The deal expands an agreement under which Wastera provides similar services to Ford in the U.S. and Mexical.

Siebel Settles Claim

Siebel Systems Inc. said it has settled chappes filed by the U.S. Securities and Exchange Commission in relation to comments made by CEO Thronas Siebel at an invitation-only conference in November 2001. The San Matano, Calif. -based software worder, which will by a 2550,000 civil penalty, was one of several companies charged under a new fast-dischance rulat that requires Companies charged tackons informa-

tion that could affect their stock to all investors at the same time. Short Takes

SPRINT CORP announced a mossaging service that lets users access corporate applications from within its Enterprise Williams and Committee announced to the service for corporation in San Francisco, announced a service for certifying data privacy policies on not Enalish Will hiller.

PeopleSoft Upgrade Focuses on Integration

NEWS

Data warehouse tool gets Web services support to ease ties to rival applications

PY MARC & SOMOHI

POPLY OF I INC I his week plans to announce an upgrade of the data warehousing software that's part of its new application surte, adding Web services support in a bid to make it easier for

users to connect to applications from other vendors. The planned release of Enterprise Warehouse Version &B is the larest step in People-Soft's evolution of its App-Connect line, a combination of portal, data warehousing and data integration broker tools that was announced in August

Paola Lubet, vice president of technology marketing at Pleasanton, Calif-based PeopleSoft, said the data warehouse upgrade includes sup-

port for Web services technologies such as the Simple Object Access Protocol and the Web Services Description Language. That should let users more easily connect Enterprise Warehouse with other applications or software portals that also support those specifications, said tubes.

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Software Addition

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Jim Prevo, ClO at Green Mountain Coffee Roussters Inc., in Waterbury, Vt., said he's interested in using Enterprise Warebouse and the other App-Connect components to help tie together his People's off-based systems and potentially other vendors' applications.

The commany which runs

The company, which runs PeopleSoR's business applications on Oracle databases, currently lacks a full-featured data warehouse. But Prevo said he plans to implement Enterprise Warehouse within 12 to 18 months to support business recording uses. •

Priceline.com Project Yields Error Reduction Nine-month RO1 | Petter functionality to mini-

expected for Web monitoring move

av barr heading.

Priceline.com Inc. last week said a Web site application monitoring project it began three months ago has yielded significant cost benefits by enabling it to identify and fix within minutes errors on its site that previously took days

Priceline installed Integri-Tea Web monitoring software from San Francisco-based Tea-Leaf Technology Inc. Last summer, anticipating a payback within nine months seeming from reduced developer time to find and fix errors.

*It's helped us find dozens of enhancements we can make to the site — everything from

better functionality to minimizing 404-type [page not found] errors," sad Ron Rese, CIO at the Norwalk, Conn., company that popularized the "name your own price"

approach to Web transactions for air travel, hotels, cars and home mortgages. Rose declined to disclose the

to disclose the cost of the project but said the anticipated nine-month return on investment for Integrilles doesn't include the expected increased sales due to improvements in the Web site.

The software has generated tips for many site improvements, and in about a dozen cases, "it has helped us materially" by eliminating potentially costly errors. Rose said. For example, he said, Integri-Tes helped find an error involving the pull-down tab for

> eity name. Many users would type in the word city even though it wasn't part of the name. Delays would result when the database regenerated a blank flast.

Rose said IntegriTes, which was released in February, seems to be unique in its "pinpoint" accuracy. Some tools from large management vendors identify only the page

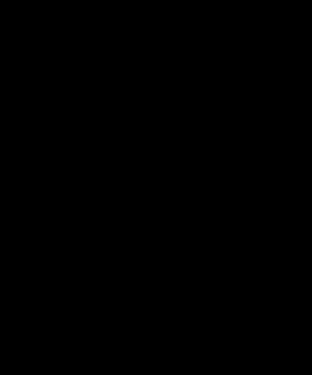
dors identify only the page containing an error, he said. Analyst Jean-Pierre Garbani at Giga Information Group Inc. in Cambridge, Mass., said he believes the product is in fact unique in its precision and use for Web applications.

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The major network management players — such as Computer Associates International Inc., Hewiett-Packard Co, and IBM — don't yield this degree of precision with Web applications, since they address infrastructure performance rather than code-level granularity.

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An IBM spokesman said the company doesn't offer pooducts in Teal.ear's space. CA
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CSC, UTC Add to **Outsourcing Deal**

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For example, she said the upgrade should simplify the process of importing data from applications develope by PeopleSoft rivals SAP AG and Oracle Corp. and exporting information back to them. In such cases, Enterprise

Warehouse can act as a company's core business intellisence platform and run multidimensional analyses on data, regardless of where the information came from, Lubet said. Version 8.8 is due for re-

Software Addition

lease by the middle of this month and can be bought sep arately or as a component of AppConnect, she added.

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fied their respective positions. But according to a recent report by Hurwitz Group Inc. in Framingham, Mass., Islandia, NY-based CA joins TeaLeaf. Compuware Corp. in Fermineton Hills, Mich., and Tonic Software Inc. in Austin, Texas in performing Web application "integrity monitoring," 9

Priceline.com Project Yields Error Reduction

Nine-month ROI expected for Web monitoring move BY MATT HAMBLEN

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It may also be news to you that VerSign handles econnected payments for some 80,000 different businesses and protects more than 60,0000 whether Some ex-PerSign has gener the last severy may building a second infrastructure for the internet. Well Blee to do the same for your business. VerSign can help you deploy a trusted infrastructure so you can conduct secure communications and transactions. So no matter how many e-commence payments your company handles, you'll know every last one of them is secure.

Learn all you need to know about infrastructure security — and how VeriSign's menaged network and security solutions can help you — by downloading our new white paper: Cyber Security in the Age of Action. Visit www.verisign.com/security

Database Woes Thwart Counterterrorism Work

GAO says INS can't locate 45% of aliens

FBI wants to interview BY DAN VERTON

Naturalization Service has lost track of nearly half of all the aliens that the FBI would like to question about their knowledge of terrorist activities. The culprit: the INS's failure to maintain an integrated. andated database system.

That's the assessment of the General Accounting Office, the investigative arm of Congress, in a report released Nov. 22.

According to the report, the INS has een unable to locate L85L or 45%, of the 4.112 aliens the FBI and the government's Foreign Terrorist Tracking Task Force want to interview. The INS has also lost track of 4,334 aliens who are from countries where al-Qaeda is known to operate and who have been

ordered to leave the U.S. The INS's inability to keep track of the current locations and address changes of nonimmigrant aliens stems from the agency's use of more than 16

one systems to capture the data. "INS does not update all databases that contain alien address information and does not have the ability to update ddress information in NIIS (the Nonmmisrant Information Systeml," the

GAO report states. The NIIS is an automated database that contains address and identity information about nonimmistrants who were inspected upon their entry into the U.S. The GAO also found problems with INS databases in distinguishing between

aliens who have the same name. In a written response to the report, Robert Diegelman, acting assistant attorney general for administration at the U.S. Department of Justice, which oversees the INS, said the agency has formed an address task force to study ways to improve the system, including the creation of a centralized and searchable alien address repository.

Tearing Down Bureaucracies The problems at the INS are indicative of a much larger challenge facing the government, said Sanjay Poonen, vice president of marketing and a homeland security analyst at Informatica Corp., a Redwood City, Calif.-based data inte gration and business intelligence soft-

ware developer. "Goal No. I is tearing down the stovepipes that exist" throughout agencies such as the INS, the U.S. Customs Service and the U.S. Coast Guard, said Poonen, referring to the cultural and

political obstacles that exist within and among different agencies. "It's not just about tracking an alien as he or she comes into the country; it's also about being able to track that

ernments and even into the private According to Poonen, federal CIOs "don't need to start from scratch."
"It's tearing down bureaucracies and fieldoms more than technology," be said, "If you look at our software, for

sector," said Poopen.

example, we take existing systems and find intelligent ways in which software can tie them together." The revelations in the GAO report

person throughout state and local gov-

came only a week before a Nov. 29 deadline for industry input on an INS request for information for its revamped entry/exit system. Congress has set a Dec. 31, 2003, deadline for the new system to be in place at all air-

ports and seaports. Oliver Tattan, CEO of New Yorkbased Daon, a security firm specializing in biometries and identity management. said two of the key issues in develop the new entry/exit system are enroll

ment in a database and verification of identity for visitors from visa-waiver countries. "Those people are not enrolled in any system," be said.

Moreover, the INS estimates that there are 500 million entries into the U.S. each year. Due to the sheer volume of entries and exits and the size of the system that would be required to efficiently handle that volume, the problems highlighted by Sept. II, 2001, could take a decade to solve, Tattan said.



Best of both worlds



Online Businesses Face Increase In Patent-Infringement Claims

BY PATRICK THIBODE

A growing number of companies are facing patent-infringement lawsuits from patent bolders claiming rights to amental and commonly used online business processes such as elec-

tronic shopping carts The claims spell potential trouble for thousands of companies, which must decide whether to pay the licensing fees or fight the patents in court at

costs that could reach miltions of dollars Every time there is a chnology breakthrous there is a hig spike in nt litigation," said John Hangartner, an at ney at Sheppard, Mullin, Richter & Hampton LLP

in San Diego, Hangartner is representing companies fighting lawsuits filed by San Diego-based Pangea Intellectual Properties LLC (PanIP), which claims that many companies with "interactive" e-comm

are violating its patents. PanIP holds two patents on technologies and processes that appear to cover any business conducting online commerce. If a customer inputs information on a company's Web site and the site also processes financial infor-

mation, the company may be infringine on the patents. PantP has seed \$1 companies, all

relatively small businesses located outside of California, and is seeking \$1,000 for a license to use what it claims is its patented technology. Some cases have been settled, but at least 16 companies have banded together to

fight PanIP in court. Similar potent-infrin tion is being pursued by Chicagobased Divine Inc., which

owns a patent it claims shopping-cart implementation.

Divine has filed 15 lawsuits alleging patent infringement and has settled six, including one with Downers Grove, Ill.-based florist FTD.com Inc. More than 150 companies have acquired licenses, said

Rich Nawracai, assistant general cour sel at Divine. Divine isn't disclosing the FTD settlement terms; FTD wasn't available for comment. Divine doesn't contend that all on-

line shopping carts are infringing. It depends on how a business has structured its technology, according to Nawracaj. But the company believes that the number of infringers is poten-

tially large and that Divine has a responsibility to maximize revenue for its shareholders, he said. A patent issued by the U.S. Patent

and Trademark Office is presumed valid unless proved otherwise. That burden rests with the alleged infring-

Challenging a patent is a difficult decision, said Michael Overly, a partner at law firm Foley & Lardner in Los Angeles. Patent litigation "is the sport of kings - it is very expensive," be said.

unting a Challenge One company being sued by PanIP is DeBrand Inc., a chocolate maker and retailer in Fort Wayne, Ind. When a

sheriff delivered the lawsuit notice from PanIP earlier this year, DeBrand co-owner Tim Beere said he was stunned. "The patent seemed to yagus I thought it was a joke," be said.

Business owners such as Beere have three choices when confronted with a claim; pay the license fee; redesign their systems, if possible; or fight it. Beere chose to fight, and he contacted other businesses being sued. "If we don't stop this now, they are going to just go on and sting hundreds of other business es," be said. The group so far is only at a preliminary stage in its effort PanIP attorney Kathleen Walker acknowledged that the patents are broad

"They do cover a lot of e-cor and that's because they were very pove at the time they were issued," she said. The natents were issued in the mid-1980s and have since been updated.

Massive Identity Theft Scam Puts Focus on Security Low-tech security measures include For proprietary and security rea-

Federal investigators have charged three men they say were involved in a massive identity theft scheme that spanned three years, involved more than 30,000 victims and, thus far, has resulted in more than \$2.7 million

The scam is thought to be the largest in U.S. history, according to a statement issued by the U.S. attorney's office for the Southern District of New York. The FBI has arrested Philip.Cummines, who is alleged to have started

the scam when be was working on the help desk at Teledata Communications Inc. in Bay Shore, N.Y. The cor pany provides banks and other entities with computerized access to consumer credit reports from the three commercial credit history bureaus — Equifax Inc., Experian and Trans Union LLC

sons, the companies involved, including Ford Motor Credit Co. and Teledata, wouldn't comment on the security measures in place when the alleged thefts occurred or the steps they have taken to minimize any future risk.

Low-tech, High-tech, No-tech Analysts said that to guard against such theft, companies should follow a combination of common-sense hightech, low-tech and no-tech security On the high-tech end, companies

should always encrypt stored data. Then, even if an unauthorized perso is able to gain access to sensitive information, he won't be able to make sense of it, according to Alan Brill, senior aging director of technology services at Kroll Inc., a New York-based security consulting firm.

checking for inactive accounts and denying network access to anyone who has left the company. "Companies probably remove those people from their e-mail accounts but don't think to deny these access to the network." said John Pescatore, an analyst at Stamford, Conn.-based Gartner Inc.

Analysts also said that employers should always conduct background checks on potential employees, espe cially those who would have access to canelrius data

Pescatore and Chris Rouland, direc tor of the X-Force group at Internet Security Systems Inc. in Atlanta, said the companies involved in the scam also had a responsibility to pay attention to the security procedures of their business partners, including insisting on periodic security audits and vulnera hility successments &



Database Woes Thwart Counterterrorism Work

GAO says INS can't locate 45% of aliens

FBI wants to interview

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from the agency's use of more than 16 tabase systems to capture the data. *INS does not update all databases that contain alien address information and does not have the ability to update dress information in NIIS (the Nonnmigrant Information System," the

GAO report states. The NIIS is an au tomated database that contains address and identity information about nonimmigrants who were inspected upon their entry into the U.S. The GAO also found problems with INS databases in distinguishing between

aliens who have the same name. In a written response to the report, Robert Diegelman, acting assistant attorney general for administration at the U.S. Department of Justice, which oversees the INS, said the agency has formed an address task force to study ways to improve the system, including the creation of a centralized and

searchable alien address repository. Tearing Down Bureaucracies The problems at the INS are indicative of a much larger challenge facing the government, said Saniay Poonen, vice president of marketing and a homeland security analyst at Informatica Corp., a Redwood City, Calif.-based data integration and business intelligence soft-

were developer "Goal No. 1 is tearing down the stovepipes that exist" throughout agencies such as the INS, the U.S. Customs Service and the U.S. Coast Guard, said Poonen, referring to the cultural and

political obstacles that exist within and among different agencies. "It's not just about tracking an alien

as he or she comes into the country; it's also about being able to track that

dem Backlog Lets Terror Suspects Get Vis

person throughout state and local goveraments and even into the private

sector," said Poonen. According to Poopen, federal CIOs "don't need to start from scratch."

"It's tearing down bureaucracies and fieldoms more than technology," he said. "If you look at our software, for example, we take existing systems and find intelligent ways in which software

The revelations in the GAO report came only a week before a Nov. 29 deadline for industry input on an INS request for information for its revamped entra/exit system. Congress has set a Dec. 31, 2003, deadline for the

new system to be in place at all airports and seaports Oliver Tattan, CEO of New York-

can tie them together."

based Doon, a security firm specializing in biometrics and identity management said two of the key issues in developing the new entrolexis system are enrollment in a database and verification of identity for visitors from visa-waiver countries. "Those people are not en-

rolled in any system," he said Moreover, the INS estimates that there are 500 million entries into the U.S. each year. Due to the sheer volum of entries and exits and the size of the system that would be required to efficiently handle that volume, the prob-

lems highlighted by Sept. II, 2001, could take a decade to solve, Tattan said.

Power

Best of both worlds PanIP has sued 51 companies, all

claims is its patented technology. Some cases have been settled, but at least 16

Similar patent-infringement litiga-

based Divine Inc., which

owns a pateot it claims

shopping-cart imple-

suits alleging patent in-

six, including one with

Divine has filed 15 law-

fringement and has settled

Downers Grove, Ill.-based

florist FTD.com Inc. More

than 150 companies have

acquired licenses, said

covers the first Internet

companies have banded together to

mentation

relatively small businesses located outside of California, and is seeking

\$5,000 for a license to use what it

tion is being pursued by Chicago

Online Businesses Face Increase In Patent-Infringement Claims mation, the company may be infring-

ing on the pateots.

fight PapIP in court

BY PATRICK THIBOGEAU

A growing number of companies are facing patent-infringement lawsuits

from patent bolders claiming rights to fundamental and commonly used online business processes such as electronic shopping carts

The claims spell potential trouble for thousands of companies, which must decide whether to pay the licensine fees or fight the patents in court at

costs that could reach millions of dollars. Every time there is a technology breakthrough, there is a big spike in patent litigation," said John Hangartner, an attor-

ney at Sheppard, Mullin. Richter & Hamptoo LLP in San Diego, Hangartner is representing companies fighting lawsuits filed by

Intellectual Properties LLC (PanIP), which claims that many companies with "interactive" e-commerce sites

PaniP holds two patents on technologies and processes that appear to cover any business conducting online commerce. If a customer inputs information oo a company's Web site and the site also processes financial infor-

San Diego-based Pangea Dich Newrocol assistant general counsel at Divine. Divine isn't disclosing the FTD settlement terms; FTD waso't available for comment. are violating its patents. Divine doesn't contend that all on-

line shopping carts are infringing. It depends on how a business has structured its technology, according to Nawracai. But the company believes that the number of infringers is potentially large and that Divine has a responsibility to maximize revenue for

its shareholders, be said A patent issued by the U.S. Patent and Trademark Office is presumed

valid unless proved otherwise. That burdeo rests with the alleged infring-Challenging a patent is a difficult de-

cision said Michael Overly a partner at law firm Foley & Lardner in Los Anpeles. Patent litigation "is the sport of kings - it is very expensive," he said.

Mounting a Challenge One company being sued by PanIP is

DeBrand Inc., a chocolate maker and retailer in Fort Wayne, Ind. When a sheriff delivered the lawsuit notice from PanIP earlier this year, DeBrand concernor Tim Searc said he was

stunned. "The patent seemed so vague, I throught it was a joke " he said Business owners such as Beere have three choices when confronted with a claim: pay the license fee; redesign their systems, if possible; or fight it. Beere chose to fight, and he contacted other businesses being sued. "If we don't stop this now, they are going to just go on

and sting hundreds of other businesses," he said. The group so far is only at a preliminary stage in its effort. PaniP attorney Kathleen Walker ac-

knowledged that the patents are broad. "They do cover a lot of e-commerce. and that's because they were very povel at the time they were issued," she said. The patents were issued in the mid-1980s and have since been updated.

BY LINDA ROSENCRANCE Federal investigators have charged three men they say were involved in a massive identity theft scheme that spanned three years, involved more than 30,000 victims and thus far. has resulted in more than \$2.7 million

The scam is thought to be the largest in U.S. history, according to a statement issued by the U.S. attorney's office for the Southern District of New York The FBI has arrested Philip Cum-

mings, who is alleged to have started the scam when he was working on the help desk at Teledata Communications Inc. in Bay Shore, N.Y. The company provides banks and other entities with commuterized access to consumer credit reports from the three commercial credit history bureaus -Equifax Inc., Experian and Trans Union LLC.

For proprietary and security rea sons, the companies involved, including Ford Motor Credit Co. and Teledata, wouldn't comment on the security measures in place when the alleged thefts occurred or the steps they have takeo to minimize any future risk.

Low-tech, High-tech, No-tech Analysts said that to guard against such theft, companies should follow a combination of common-sense hightech, low-tech and no-tech security

On the high-tech end, companies should always encrypt stored data. Then, even if an unauthorized person is able to gain access to sensitive information, he won't be able to make sense of it, according to Alan Brill, senior managing director of technology services at Kroll Inc., a New York-based security consulting firm.

Massive Identity Theft Scam Puts Focus on Security Low-tech security measures include checking for inactive accounts and

denying network access to anyone who has left the company. "Companies probably remove those people from their e-mail accounts but don't think to deay them access to the network," said John Pescatore, an analyst at Stamford, Conn.-based Gartner Inc.

Analysts also said that employers should always conduct background checks on potential employees, especisily those who would have access to sensitive data.

Pescatore and Chris Rouland, director of the X-Force group at Internet Security Systems Inc. in Atlanta, said the companies involved in the scam also had a responsibility to pay attention to the security procedures of their business partners, including insisting on periodic security audits and vulnerability assessments.



Continued from page 1 WebSphere

cia Seybold Group Inc. They're not in a hurry for more releases sooner." Analysts said WebSphere 5, which was due in the third ouarter, will bring DRM up to par in terms of JZEE and Web services support and in line with BEA Systems Inc.'s WebLogic 7.0, which shipped in late June. IBM and San Jose-

based BEA are the market leaders in the application server market Ahead in Support

But Stefan Van Overtveldt, program director of Web-Sphere technical marketine said IBM not only complies with 12EE 1.3, but also supports a majority of the 12EE 1.4 features that are due to be finalized next year. He said IBM also added support for Web services technologies that It donated to the open-source community

Explaining the WebSphere delay, Van Overtveldt said top customers told IBM they wanted to get the WebSphere Studio developer tool, which had been due in November prior to the application server. So IBM flipped the product schedules and finished the tool first, which is interrated to work with the application

"The delay really only matters to the most cutting-edge of developers, and that's [IBM's independent software vendor | partners," said Josh Walker, an analyst at Forrester Research Inc. in Cambridge. Mass. He said IT managers.

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ning WebSphere 4 and two servers running WebSphere 3.5 to support its homegrown browser-based applications for registration and order, inventory and transportation management systems. Mowen

But Mowen said Bekins will consider moving quickly to WebSphere 50 if it delivers on its promises of performance boosts, administration improvements and tool integration that could help developers code and test applications faster and set up and deploy

Emerprise JavaBeans and Web services more easily. Walker said IT shoes have been clamoring for improved tools to make it easier to deploy application servers. The

dors have reached a level of parity. "where there's no longer this feature/function race," he said. "It's now about making your customers productive."

Additional Features The other new features in

WebSphere 5.0 include the following · Support for new autonomic computing technologies that aim to help companies reduce the cost of administration and improve application response time. Van Overtveldt said the server can perform self-configuring to move from a single-server environment to

a clustered environment, auto-NEW FEATURES WebSphere

Version 5 # JZEE 1.3 compliance

 Enhanced Web services support, including the Web Services 3.0 high-speed SOAP parser that IRM gave to the open-scene community, a Web Services Gateway for more secure deploy ment, a private UDDI reposition

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Continued from page I

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Web Security

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1BM also built in a Web Services Gateway to allow companies to take internal Web services applications and securely publish them to the Internet; a private Universal Description, Discovery and Integration repository; and the proprietary Flow Definition

\$8,000 for a single-server con-Markup Language (FDML) to nur b

Lockheed Martin Corp., Raytheon Co. and Rolls-Royce PLC. However, to secure its Web-enabled aerospace col-Isboration environment. known as ForumPass, Exostar chose hardware-based encryption technology from

Woburn, Mass-based oCipher Exostar is using nCipher's nShield hardware security module (HSM) to provide database and document encryption within the exchange and for XML-based security used to integrate external applications and Web services.

Corp.

The nCipher HSM provides end-to-end encryption and digitally signs all transactions by means of the Security Assertion Markup Language, a secure XML-based language used by Web services for the exchange of authentication information and security credentials from one site to another or for users to gain ac-

cess to Web applications. "The mind set of semanace and defense companies is that they don't want their intellectual property to be anywhere but under their control," said leff Nieriny, security manager at Exostar But the traditional practice of encrypting databases often leaves the enervotion key with the database, potentially allowing skilled back-

ers to steal the key. "Now we're protecting the key inside one of nCipher's HSMs," said Nieriny, "Because the key never leaves the band. ware device, it's never exposed to somebody who has control of the file system. The BAE Systems. The Boeing Co., data is more secure now than

allow users to visually draw workflows, Van Overtveldt said. Van Overtveldt said FDMI

is a subset of the Business Process Execution Language for Web Services announced in August by IBM, BEA and Microsoft Corp. WebSehere prices start at

figuration and as \$12,000 with support for network features. such as clustering and fail-FIREWALL SPECS



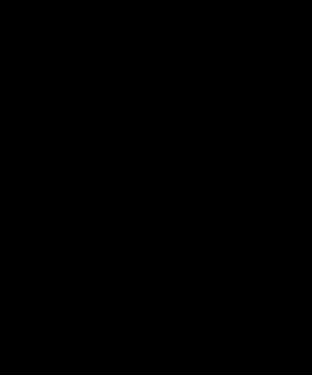
Firewalls are anything but irrelevant, said Neil Gehani. senior product manager at Check Point Software Technologies Ltd. in Redwood City. Calif. He said that although all commercial firewalls are nules-based many don't inspect the content of the data passing through them. Check Point, however, has a patented technology that looks "deeper into the content of Port 80, including other things like peerto-peer connections and instant messaging," said Gehani,

it would be on (our users')

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*Other firewalls assume a lot of things about the packets that are passing through the port," he said, adding that malicious code can mask itself as HTTP content.





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WHY NOT STOP POURING MONEY DOWN THE DESKTOP DRAIN?

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MasterCard International Inc. has largely completed a rollout of a new payment processing system that's designed to simplify data transfers between retailers, banks and the credit card company's back-office transac-

tion-clearing applications. During a briefing held last month at MasterCard's global technology and operations center here, IT officials said that 97% of the company's 25,000 card issuers worldwide have started using the IP-based payment system. They added that 99% of the member banks in the U.S. have migrated.

The system uses a virtual private network (VPN) to run a secure messaging service that offers a standardsbased format for transmitting purchase surborization, clearance and settlement data between retailers, banks and MasterCard, said Rob Rees, senior vice president of systems development at the Purchase, N.Y.-based company.

MasterCard began the project six years ago and has invested about \$296 million to develop the VPN and build the St. Louis data center, "This is the hierest technology change MasterCard has ever done," Reeg said. "It gives us a globally integrated platform."

But the company still has more work to do to fully tie together its worldwide rations. For example, Reeg said MasterCard has yet to choose sites for new regional IT service centers that it

plans to open in Asia and South America to support localized processing of credit card transactions. A European service center is operating in Belgium.

Europe, which was known as Europa before it was bought by MasterCard.

banks in late 2000. In addition to its VPN, which was completed in 1998. MasterCard is using technology from existing vendors such as IBM, EMC Corp., Sun Microsystems Inc. Oracle Corp. and Storage Technology Corp. to support the payment system. "We didn't want to add another layer of complexity into this by

senior vice president of computer and network services at MasterCard. Outside the data center, MasterCard is using 700 IBM Netfinity servers to terface processors." The Netfinity systems, which are located in the facilities of different member banks, direct data

The secure messaging service is

However, Reeg said that MasterCard is only about halfway through a scheduled five-year effort to converge its systems with those of MasterCard

payment processing system in April 2001 and began converting banks to it

MasterCard announced plans for the late last year. The move by MasterCard followed Foster City, Calif.-based Visa U.S.A. Inc.'s rollout of an IP-based payment processing network for U.S.

changing vendors," said Artic Ahrens

function as what it calls "member intraffic from merchants to credit card issuers and then to MasterCard.

New Data Center Put MasterCard to the Test

non MasterCard Ripped the switch on \$135 million data conter here over

MasterCard Nears Finish of Payment System Rollout tion for Standardization's 8583 message set. Purchase authorization requests can now be processed in less than 150

milliseconds, compared with about 650 proprietary approach. Recg said

milliseconds using MasterCard's older, The messaging platform also lets banks process clearing transactions up to six times a day instead of having to run a single batch job, he added.



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Tight Budgets Put More Pressure on IT

Faced with frozen or declining budgets, IT managers still have then make sure that they get

to help create "performance driven" companies - and

roper credit for doing so. That was the main messas at a conference held here last month by AMR Research Inc. AMR analysts said many com panies are spending their FT dollars to address specific business goals, such as getting the right products to customers at the right prices. Citing a 100-user survey it

lucted in October, AMR predicted that the average IT budget will remain the same next year. With that in mind, IT managers must be able to closely wed applications to corporate business processes said AMR analyst Bob Parker.

In addition, IT staffers must start to actively keep score on company performance and show how they're helping to improve it in areas such as emplovee productivity, according to Parker. "A common complaint we get is that IT people don't get any credit for delivering value," he said.

Fast Return

Rhonda Hocker, CIO at San Jose-based BEA Systems Inc., said the middleware vendoe has adopted a general rule that its IT projects should promise a return on investment within one year, BEA is also trying to limit project teams to no more than 12 people and make sure that the work can be

completed quickly, she added. "Nothing must be longer than four months, given the economic climate," said Hocker. But BEA is moving forward on IT, she added. For example, Hocker said her top priority is creating a set of common services, such as security and single sign-on capabilities, that can be accessed by all of BEA's

The talk about the pressures faced by IT managers rings true for one user not at the conference. "Even though the budgets are the same as last year, we in IT are still given special projects [needed] to run the business," said Michael Stoeckert, CIO at EPL Inc., a Birmingham, Ala-based provider of data processing

services for credit unions. EPL is doing total cost of ownership studies in an attempt to find ways to cut IT operating costs, and it's also using performance and loadtesting tools to find and fix bugs in its applications. That

has belped the company improve end-user respo and ease software upgrades, Stoeckert said, adding that the ulting savings can be ap

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MARYFRAN JOHNSON

CyberWhoCares? IT Should!

S CYBERTERRORISM REAL? Should corporate IT be worried about it? A few weeks ago, I would have answered no to both questions. I would have argued that labeling any computer

attack as "terrorism" is a grotesque exaggeration. I would have cited renowned security expert Bruce Schneier, CTO at Counterpane Internet Security Inc., who contends that genuine cyberterrorism is still

decades away "A network going down is not terrorism. Everyone who watched on Sept. II knows what terrorism looks like." Schneier said in an interview with Computerworld Canada last month [QuickLink 33347]. "I would define cyberterrorism as using a computer to make planes fall out of the sky or build-

ngs collapse." But then we published an interview with Sheikh Omar Bakri Muhammad, a London-based Islamic cleric who is directly linked to Osama bin Laden and the al-Oaeda terrorist organization [QuickLink 345971 He talked about how al-Oseda is actively planning to use the Internet for cyberattacks against U.S. companies. Several intelligence and security experts said those threats should be taken seriously certainly as seriously as we take

other computer crimes. "This should put to rest any notion that terrorists who are willing to blow themselves up aren't thinking about more sophisticated attacks." said reporter Dan Verton, who interviewed Bakri by phone in the course of researching a book on homeland security and cyberterrorism. Verton is also moderating a cyberterrorism forum on Computerworld.com this week (QuickLink a2710), "Americans in general have a tough time understanding radical groups and an even harder time coping with our own vulnerability," he added. "But we

need to be aware of this

type of thing." Critics of our stories disagreed, however. They vehemently objected to us providing a known terrorist support er with any platform whatsoever from which

to threaten Americans. "This story is not newsworthy and your repeated hawking of it ounts to nothing

more than fear-mongering," one wrote. An Israeli reader said that merely publishing the intentions of terrorists achieves *80% of their enal." Another scoffed that "any cyberattack by al-Oaeda is going to be insignificant compared to the destructive efforts of millions of bored teenagers with readily available

hacking tools." I understand these objections and respect the emotions behind them. but I still believe that publishing such information is more useful than ignoring it. While our stories

handful of readers, they also generated huge snikes in our Web traffic each time one was posted. One of the postings in our online forum raised that reality-check question again: "As IT-oriented professionals. most of us are quite aware of how much damage can be done by worms or backers, but how much

do these affect the 'real' world?" That's a very difficult question to answer. Surveys of CIOs and IT managers across a wide swath of U.S. industries continually show a worrisome lack of confidence in existing computer security practices.

A CIA analysis paper recently sent to a U.S. Senate committee raised this red flag: "Cyberwarfare attacks against our critical infrastructure systems will become an increasingly viable ontion for terrorists as they become more familiar with these targets and the technologies required to attack them." In the end, it hardly matters

which "cyber" label we use - cyberterrorism, cyberwarfare, cybercrime or cyberattacks - as long as we pay attention to these early warning signs. We know terrorist groups are focused on building IT skills and investing in computer science education for their followers. We hope they'll never launch a successful cy-



PIMM FOX Will Capellas Resurrect

www.computerworld.com

Telecom? THE RECENT appointment of HP's ex-No. 2 exec, Michael Capellas, to run WorldCom may breathe life into the rather exhausted notion of computing and communications convergence. It also points the way to a possible resurrection of the telecom industry through the minis-

trations of a seasoned IT executive. For years, voice over IP and easy-toconfigure, high-security VPNs have been touted as the next wave of innovation, along with exotic enterprise services such as video-on-demand from the likes of WorldCom. Instead, it delivered innovative accounting with \$9 billion in fraudulent bookkeeping and \$40 billion of debt

To be successful, Capellas will have two dooning his ercen accounting investors, bondholders and creditors that all's well on the finance side while also wearing a cleanroom smock to as sure customers be

can deliver the technology they want. That won't be easy Telecom is mired in a deep depres

sion, and customers remain sun-shy of new, potentially expensive technology. Capellas has signaled that one of his first tasks will be to set up an advisory board of 10 to 12 of WorldCom's largest customers. The test will be whether he uses it to really grapple with customer issues and drive changes that move WorldCom's focus

from voice to data services. The goal should be to find the right mix of services to make the IT network more than a hodgepodge of ove lapping dependencies. The new CEO needs to deliver a reliable, high-speed network backbone married to IT pecessities at prices that make sense in today's economy - for customers as well as for WorldCom.

These efforts will be for naught if the advisory board is merely window dressing for customer grievances.

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BRANDON MUSLER

er life &

Requiem for A Predator

HARLES WANG'S abrupt retirement late last month, after 26 years, is giving detractors a last chance to disparage his accomplishments by dwelling on recent boardroom battles and the current investigations that they claim will scar his legacy. Wang was never a media darling, and competitors hated him, but the fact remains that he built a \$3 billion company from scratch. Few companies, in any industry, have grown so successfully by acquisition as Computer Associates. Wang clearly did some things quite well.

clear where CA fit in the software ecosystem: predator. Whether competing against IBM or other software companies. Wang played the game as a blood sport, oot a pastime. He built his company through acquisition. His strategy was straightforward: wait for a competitor with less capital or business acumen to make itself vulnerable, and nounce. Many software start-ups were well versed technically but were naive, lacking a credible business plan or experienced management. Wang bunted on fertile ground.

Almost from the beginning, it was

CA climbed the food chain fast by taking the prime cuts and dispen with the rest. Stories about rough-and-

tumble business practices shound but consider the context. When CA bought a company, its offer was always the best, but often the last resort. Wane shattered delusions as he tore into the acquisition to find the skele tons in the closet. Besides bloated compensation packages and lucrative perks, it wasn't unusual to discover many phantom employees - relatives of top officers -

on the payroll. All this remained hidden, and laid-off workers. rather than blaming the people they worked with naturally resented the New York interlopers who showed them the door. But to Wans, who spent much of his career in a Spartan office behind hand-me-down furniture running an ultralean company, their situation was a direct consequence of inept management and bad business

Was CA's voracious appetite a help

tomers? A carnivore that grows by devouring competitors doesn't prograte effection but beginnes is about mutual interest. New customers delighted in the innovative pricing and packaging that made other wise inaccessible technoloev available. Installed customers complained of higher maintenance fees and degraded support

or a hindrance to most cus-

CA kept programs oo the market that otherwise would have gone completely unsupported and been untenable to own IT managers faced with the Hobsoo's choice of a painful migration or paying through the nose usually chose the latter. That's why CA continued growing while the prior owners became food Of course, it was often easier to point a finger at CA than explain how a denartment had painted itself into a cor-

oer. But the volume of complaints

about shoddy CA support and sales practices can't he ignored either. Wang's undeniable value to cus-

tomers - mainframe owners in particular - was as an alternative to IBM. CA explosed the intranssence of Big Blue's pricing and business contracts Whether they intended to sign or not. IT veterans invariably kept a CA coffee mug on the desk for leverage when the guys in white shirts came calling ance by thinning out the herd, but they also keep large rivals oo their toes. Even if you don't admire Charles

Wang, having him stalking through the software ecosystem was beneficial Who else could possibly make an elephant dance? Lou Gerstner may have been Big Blue's mahout, but Charles Wang lurking in the underbrush provided the real motivation.

WANT OUR OPINION? More columnsts and links to archives of previous opiums are on our Web site

Blades Can't Wait

practices

Wast To Next Year' (Quicklunk 336441 since we are currently eveluntion blade servers to out the costs. of our sprawling Windows server erainment in seletion bioder are the perfect lightweight servers to add to a SAN environment. However, taking Gartner's advice

about holding off until standardized products are available is ndiculous. I can't wait to buy a blade rack from Hewlett-Packard and blade servers from IBM and Deli, and then have all three pointing the Inger when something an't working. Til stick to a single vendor, in which case the wavds Gartner is talking about are inviewent. I like the idea of a proprietary design - may the best de-

Tod Ashby Vice president of IT, Van Gilder Insurance Corp. Denver

Shop Around

Nov. 11 story "The Wendor That Knew Too Much (QuickLink 33963] about how a CIO didn't her with an REP because he ed a round of golf with a veno who had insider information. This caused the project to go over time and budget. The lunny part is that the vendor is being blamed for this mess. The CIO had every right to go through the RFP process, he chose in award the arranct to he buddy This is alon to blammo a car sales men because you tailed to shoo assumed or neocolitates

Ed Hiney Consultant, Nasgoruck, Conn., emhconsulting@yahoo.com

Finding Motivation Dagno Your Stateholders' we excellent [QuickLink 34260]. It ran just in time for me as I begin a new

ages at the ABA. One of the things I host Hard about the article was the suggestion that teams should oveate plans and processes to focus on and manage the stakeholder relationship. The column reminds me of the book Swee With the Sharks Without Being Eaten Alve, by Hervey Mackay - and molvetes me to develop a plan.

Kevin Bentch pazes cus American Bar Association.

Building a Rep ISBNESS RELATIONS are prof

By much like interpersonal relatrans [Quick]_mix 34182]. You don't keep triends by cheating and abuson them. The same cores with busyness periners. You always win by being just and professional. That's how you

build on a good regutation, and a good regulation always pays off in the end Not only will an abused supplier remember his abuser, but he will tell everyone in the business. Unless

they absolutely need to, other suppilers won't risk doing business with a client with a bad regulation. **Guy Pisapia** IMS director, Quebec

Mobile Approval HE DECISION to go with mobile technology is getting easier

(Quest link 30974) In a deserve work environment where workers o workspaces are moved around a lot. or when the mobility of devices is part of a larger business continuity plen, the decimen is made for you. Going mobile can be part of a decesion to add a lawer of abstraction een the user interface and the annication. This in turn in the limit

step in developing an infrastructur that is more resident to disruption If done correctly, it provides a se-

cury connection to a system when the user doesn't necessarily know nor care where the application resades or on what operating system (i runs. The operating system of the user interface is independent of the this scenario, the company is free to select the device and operating sistem best suried to the employee's use. And if the emolouses need to be everywheld, they can continue to work wherever they wind up, so long as they have connectivity Paul Dube

StrutfTech Consulting LLC. Now letters

PDubej@StratfTech.com

DMPUTERWORLD welcomes comments from its readers. Letters will be edited for brevily and clarity They should be addressed to Jame Fride letters editor Computerworld. PO Box 9171, 500 Old Connecticut Path, Framingham, Mass. 01701. Fax: (506) 679-4543. E-mail: letters@computerworld.com.

include an address and phone numher for immediate verification. on letters on these and other

is are on our Web sile

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sodnote economy — for customers or well as for WorldCom. These efforts will be for naught if the advisory board is merely window dressing for customer grievances.

Capellas has also yowed to reoreanize WorldCom's sales teams, taking a direct interest in their accounts and procedures. This should also boost morale and perhaps spruce up telecom's image as a sector that delivers technology remines to enhance vital business functions rather than a marketing muchine that knows only how to slash prices and undercut competitors. WorldCom has not to start showeasing world-class technology, not

quick PR fixes. In the coming months, Capellas will come under scrutiny because the biggest question remains: Has he been installed at WorldCom merely to prepare the company for sale, much as he

handed Compag over to HP? He has said he doesn't want the company shopped piecemeal, but he didn't rule out a complete sale. Let's hope convergence sets another chance at life D

BRANDON MUSLER

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OPINION

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Rlades Can't Wait ENJOYED THE ARTICLE "Skades

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Shop Around

BOT A BOOD LAUGH out of your Nov. II story "The Vendor That Knew Too Much" (Quick) into 339631 about how a CIO rivin? bother with an RFP because he played a round of golf with a vendor

caused the project to no over time and budget. The lunny part is that the vendor is boing blamed for this mess. The CIO had every note to po-

through the RFP process he chose to award the project to his buddy This is alon to blaming a car salesman because you lailed to shop around or negotiate Ed History

Consultant, Naugaruck, Conn. emheursulting@vahoo.com

Finding Motivation AVID FOOTE'S column "Man-Daging Your Stakeholders' was excellent | QuickLink 342601 It run ast in time for me as I beam a new position as customer milations thatoper at the ABA. One of the things I

best liked about the article was the supportion that trums should onate plans and processes to focus on and manage the stakeholder rebenowing. The column remeds me of the book Swirr With the Sharks Without Being Eaten Alive, by Harvey Mackey - and monutes me to dovolop a plan

Kenin Bantels Manager, customer relations American Bar Association, Chicago bentchkäntaff.abanet.org

Building a Rep MISSINESS RELATIONS are port B to much like interpersonal rela-

trons (Duckt, nk 34182) You don't keep hends by cheeting and abusing them. The same goes with busi-You sheave wen by being and and renlessanted. That's how was

build on a good regulation, and a condition shows need off in Not only will an abused supplier remember his abuser, but he will tell everyone in the business. Unless

these absorbidable meant to influent such plers won't risk doing business with a cleant with a had providation **Guy Picapia** IMS director, Quebec

Mobile Approval HE DECISION to go with mobile technology is nothing account

(Quektunk 33974) In a dynamic work environment where workers or worksnores are remont arrests a lot or when the mobility of devices is part of a larger business continuity plan the decrease is made for you Sound mobile can be part of a decroon to add a lawsr of abstraction between the user interface and the applications. This, in turn, is the limit

step in developing an infrastructure

If done correctly it provides a secure connection to a system where the user doesn't necessarily know nor care where the application resides or on what operating system if rure. The repression suction of the user interface is independent of the application and its requirements, in select the device and operating sys tem hest susted to the employee's use. And if the employees need to work wherever they wend up, so long as they have connectivity

Paul Dube Strotf Fech Consulting LLC. New Jersey PDube a Strat Flech.com

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Fax (506) 879-4843 Include an address and phone num her for enmedate vaniscation.

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TECHNOLOGY



Q&A Pioneer's Perspective

Rajiv Gupta, one of the ploneers of Web services technology at Hewlett-Packard, discusses what Web services have become and what they promise for the future as he launches a new company. Paga 36 SECURITY MANAGER'S JOURNAL WLAN Chase Reaches Endgame

After a month of wrestling with the problem, Mathias Thurman finally closes in oo illicit — and carefully hidden — wireless LAN access point Page 42



INION etro Ethernet Redux

Metropolitan-area network services built on native Ethernet protocols could deliver cheaper, more scalable bandwidth, but only if IT demands that carriers deliver them, says Robert L. Mitchell. Pace 45

For the gadget buff, 2002 has been a little less interesting than some earlier years, with more me-too products and fewer that were really innovative. Still, with 2003 fast approaching, there are digital delights galore, and we've tried to highlight some of the more interesting ones - items that might make good gifts for some of the people on your list - yourself included, of course. This year's suggestions range in price from \$30 to just shy of \$70,000, just to make sure there's something for everyone! **By Russell Kay**



Stuff

Portable Computing

Flip-Pad Voyager 1 MANUFACTURER: Xentex Technologies Inc., San Jose WEB SITE: www.xentex.com

PROCE: \$4,995
There's never been another "laptop" like this one, which unfolds in querters to reveal two 13,3-in, LCD displays side by side

weel two 13.3-in, LCD displays sade by side - and one of them can be rotated. At 12 lb., it's not for the road werrior, but it's a remarkably ingerious solution to the problem of graph display onto an essite mouthly computer.

Continued on page 30

HOW DOES APRILIA PLAY TO WIN?

IBM.

@server



Winning with ERP: Italian motorcycle sensation Aprilia has an enviable track record. Their ERP solution, automating their order-to-shipment process, delivers nearly 100% uptime? How? A high-revving IBM UNIX server high availability cluster running AIX*3 For an IDG report on how growing companies are using IT to advance their business, go to ibm.com/eserver/aprilia

Choises in the game Play to went



Portable Computing, continued from page 27

Fujitsu Stylistic ST4000 Tablet PC →

MANIFACTURER Fujitsu PC Corp., Santa Clina, Calif.

WEB SITE: www.fujitsupc.com

PRICE: EX. 26th and Low. With more than a discussion of engineering, manufacturing and marketing persibility comparison, you'd expect if just on launit a sold entiry test the new Microsoft Werkern Ealer Comparison, you'd expect if just on launit as sold entiry test the new Microsoft Werkern Ealer Comparison and the marketing of the comparison and the sold entire and the sold entire contained tools on complete devices operation used and these old entire and comparison and the Table Ellock chains expenditure and the sold entire and the Table Ellock chains expenditure or comparison and production and the sold entire and t

Computer Gear

X-174 Flat-Panel Monitor MANUFACTURER: AG Neovo Technology Corp., San Jose

MANUFACTURER: AG Neovo Technology Corp., San Jose WEB SITE: www.neovo-usa.com PRICS: SQ49

Now that flat-panel monitors have become affordable and entered the mainstream, style is beginning to get some attention. One of the codest flat panels mailable is the T/F in all false's model from Neovo, it's faced

with a specially formulated scratch resistant optical (dess filter (point or pending) that emproves color definition by allowing only specific red, green and blue wavelengths to pace, screening out intermediate light and reflections. If a sed on the priory side but definitely worth looking at and into.

PC Controlled CD Organizer +
MANUFACTURER: NDS USA, Garden Grove, Call.
WEB SITE: www.ldsusa.com

Precision 10 Man and a collision devices on the market for storing CDs that contain make, obstiner or data. One of the most institutes of the CD+ in high water the 75 motor-land dreamen, each holding a single dice. You attach it to your PC- and retails simple software program to carbon and organize your dices. It even then a "herd" families to you PC- and retail a supple software program to carbon and organize your dices. It even the a "herd" families may be precised when it is nead and what lam'. You can also access doos via a half-in marries (support, and each dreame that you market precise (support and each

LED indicator to let you know if it's empty or full. Two or more organizers can be infect together and menaged as a single unit.

PDAs

Wrist PDA →
MANUFACTURER: Fossi Inc., Richardson, Texas

Parhelia Graphics Card MANUFACTURER: Matrox Graphics Inc., Montre

MANUFACTURER: Natrox Graphics Inc., Nontre WEB SITE: www.matrox.com www.s-1240

Presents Johns Remember the big hullabatico when Windows 98 came with support to using two recritices simultaneously? Makes has gone that one better, with a new high-end graphics card that supports where members. The Parhelia comes with 126MB of video memory, aimed in part at the gam-

Pariesa comes was zones or voce memoing crowd, but it will also be appreciated by graphics workers and digital video editors. Video diagnostics firm DisplayMate Technologies Corp. rated the Parhella

Technologies Corp. rated the Parhella as providing "the very best image quality available" and chose it as its reference standard.

WebPack →

MANUFACTURER: Swiss Army Brands Inc., Shelton, Conn. WEB SITE: www.swissarmy.com PRICE: \$100 in refon, \$335 in leather

PRICE: \$190 in rylon, \$335 in leather You need some kind of carrying case when you travel with a laptop. One of the riffiest I've seen recently is the Victorinos

Hebitals the sent receivery is an incomparawhich ask from the maker of the original Swiss Army Kinlle. This light backpack made of sharbly bellistic repton comes in black (what else? — but at least there are splashes of red when you unaip the front compartment)

and features a detachable strap system with a single fitting at the log that's easy on your back and shoulders. There's also a enrousable packed inset for protecting your computer. It's expandable, loo, and if you can't it overything into this case, then you really

put using a tiny stylus that's integrated into the watchband. The unit has 2MB of internal memory and will run all Paim applications, including the standard ones address book, distancials, memo pad, calculation and to-dio list

A rocker switch is located where you're used to seeing a winding letting stem, and three is an interest port for beaming capability, synchronization is done via a USB cabbe. The device will use enchargeable batteries, with a projected the of four days, it weight less than 6 or, and is about 15 by 25 by 0.5 in in size.

continued on page



For their 100 tournaments each year, the PGA TOUR depends on Pelm, Inc. and IBM for live scoring. With an application called ShotLink, scorers travel from hole-to-hole recording strokes and shot information on Paint" handhelds. The data is then transmitted wirelessly and

uploaded to leaderboards, broadcast booths, and online audiences nationwide. The enhanced scoring solution has helped the PGA TOUR provide real-time data to millions of viewers. To read more enterprise success stones from Palm, visit us at palm com/enterprise todays.



Communications Gear

Sidekick DISTRIBUTOR: T-Mobile USA, Bellevue, Wesh. WEB SITE, www.tmobile.com PRICE: \$199, plus a service line of \$40 per month for unlimited

data, 200 voice minutes and more This award-winning all-in-one device lets you surl the Web. send and receive e-mail, chaf using AOL Instant Messenger, play games, take and e-mail snapshots, and talk it up with htends and family. Originally called the HipShot by its maker, Palo Alto, Calif -based Dunger Inc., the snit was named Best of Show (PDA, handheld and mobile wireless) at the 2002 Consumer Electronics Show and was runner-up for Overall Best of Show. The Sidekick operates on Deutsche Telekom subsidiery T-Mobile's no-tionwide all-digital GSM/GPRS voice and high-speed data network, which covers more than 200 million people in 8,000 cities.

Tree Communicator 270 and 300 ← FACTURER: Handspring Inc., Mountain View, Calif.

The first company to successfully marry a cell phone with a POA, Hendspring now adds two color models to its Treo lineup: the 270 for BCM networks, and the 300 for Sprint PCS Group's network. With their built-in thumb keyboards, they promise to lighten the load for the traveler who has

Transportation

Segway Human Transporter w EB SITE: www.segwey.com

PRICE: \$4,950 It couldn't possibly live up to the hype preceing its announcement, but inventor Dean Kamen's Segway Human Transporter (please don't call it a scooler, he says) is still a pretty interesting machine With three operating modes and a top speed of 12.5 mph, the self-balancing, electric-powered transportation device can take you wherever you can walk - at least until you much stairs. The Segwey Human Transporter isn't in stores yet, but you can order one exclusively on Amezon coming's Web site.

lotorola V70 × MUFACTURER: Motorole Inc., Schaumburg, III.

PRICE: \$400 is it a phone or a techion statement? When you open the avant-gards V70 by rotating its unique cover, you see a blue electroluminescence called MotoGio shining through the translucent keyped. As belts a hot new phore, it can be oustomized with changeable displey bezels, menus and ring tones. And if MotoGlo is too mu hit the voice-activation key and make your call without having to punch in the numbers.

Pocket PC Phone MANUFACTURER: T-Mobile USA, Bellevus, Wash. WEB SITE: www.tmchile.com

PRICE-\$550 We've seen phones that incorporated Palm-based organizers, and add ons that can turn a PDA into a phone. But this is the first integrated PDA/phone based on the Microsoft Pocket PC operating system. Re-fecting its heritage, the unit has a big, bright, easy-to-mad screen, though that also makes it just a little swisward to use as a phone. But all in all, if you're looking for a multifunction PDA/phone combo, this one deserves your conside

BMW 745i sedan

MANUFACTURER: BMW of North America LLC, Woodcliff Lake, N.J.

WE'B SITE: www.briwusa.com RICE: \$89 195 This BMW may be the gookiest car on the planet. Its major controls are

unities those of any other car in the world, so you'd botter mad the in-struction manual before setting off. BMW's Drive concept brings "drive by wire" and computer menus and controls to automobile operation. There's been some controversy as to how us or sale this approach is, but you can drop by

a BMW dealer and see for yourself, either on an actual car or on the PC-based



PDAs, continued from page 30

NUFACTURES: Palm Inc., Migitas, Calif. WEB SITE: www.palm.com

An excellent PDA for the first-time user, the Zire combines a strapped-down Palm engin with a classy all-white design. It's incredibly light but still includes a built-in rechargeable

Pixter Plus → NUFACTURER: Fisher-Price Inc., East Aurora, N.Y.

WEB SITE: www.fisherprice.com PRICE: \$62 Think of this as a PDA for kids. The Poter has a louch-sensitive screen that lets kids draw pictures (and store up to 20 of them) and play a venety of games, its sturdy, colorful plastic case comes with a flexible play in screen light for play-ing in the dark. The Poder features several built-in creative activities, including freestyle drawing and connect the dots. Items can be password-protected. Sepa rate software packs (about \$10 each) add flip-book enimations and more gam

Continued on page 34



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That's Entertainment

PDR-3310 Digital Camera →

MANUFACTURER: Toshiba America Information Systems inc.'s Imaging Systems Division, Irvine, Calif. WEB SITE: www.loshiba.com/tabasd

MCF: About \$500 here are lots of high-quality, midprice digital cameras on the market today. One of my layorities is Toshiba's 3310, which takes 3.2-megaposel pictures and stores them on a thumbrailsize Secure Digital card. It's a tiny little package, a tad bioger than a credit card (one that's 1.25 in, thick!), wrapped up in a



WER SITE WAY SEE

PRICE: \$1,000

The DVD-L100, with its huge 1- in.-thick widescreen display opened reveals a locking disc bay that accurately tracks DVDs. CDs and even CD-RW discs, no matter what position the player is in. This portable DVD ayer is very versatile, so you can bring it to many different ocations and enjoy the largest picture available from any

dedicated portable on the market. Smoly the best MP3 mu

MANUFACTURER: Apple Computer Inc., Cupertino, Calif. WEB SITE: www.apple.com

around, Apole's elegant looking (Pod now comes in a version that works with Windows PCs right from the start (though

you do need an IEEE 1394 - alsa FireWire - port) With a 5, 10 or 20MB hard drive that can store hundreds of CDs' worth of music, it's still shirt-pocket-size and ivers glonous sound through its tiny but remarkably good-sounding earbuds. What makes the iPod really

stand out from the crowd is its display screen, music file organization and ability to find music by artist, album or song title. You can also store your cal-endar and contacts on the iPod, but remember that it's a read-only device and you can update it only when it's attached to your PC.

Kay is a Computerworld contributing writer in Worce Mass. You can reach him at russkav@charter.net



LTM245W LCD TV

FACTURER: Samoung Electronics America, Ridgefield Park, N.J.

This elegant, 24-in, flat-penel TV uses an LCD screen, it comes with an internal TV tuner and external jacks to allow you to view virtually any source - HDTV, DVD, VCR, digital video, satellite and more. Because the unit is entirely digital can also use it as a supersharp PC monitor, with up to 1,900-by-1,200-pixel resolution.

SnapStream PVS and Pocket PVS ←

MANUFACTURER: SnapStream Medie Inc., Houston WEB SITE: www.snapstream.com PRICE: \$50, \$30

So a Two DVR isn't in your budget (see review below)? This softwere package from SnapStream offers an inexpensive way to get most of the same digital video recording function ality using your PC and its hard drive. And with an add-on pro

Despite an ongoing court challenge, the digital video recorder is clearly one of the appliances of the future. With the ability to peuse live TV programs without lesting or missing them, plus the capacity to record up to 80 hours of video from broadcast, satellite or cable sources. Two can help you take back control over your schedule and still catch up with your lavorite programs. 9









Rajiv Gupta, who helped develop an early version of Web services when he was at Hewlett-Packard, discusses where the technology is going.



Rajiv Supta was one of the lead architects of the 64-bit Itanium processor architecture that resulted from Hewlett-Packard Co.'s partnership with Intel Corp. But it's Gupto's work

for HP to Speed division, which he started in 1998, that has greater hearing on his current endeavor. Capta and his core e-Speed architects left HP last year to will try to put to use the lessons he learned during that early HP Web services with the total wind the last new company. Confluent Software Inc. in Suntryvale, Calle, which launched data mount. Compluertworld 1 Carol Silva about Web services and his view of their

How do you define Web services? To me, a
who service is any piece of autonosmous logic or code that delay with the
ritrest of the world using open-standardsbased instrices. And the specific interfaces that go under the rubric of
who services are SOAP for divnocation,
the
SUDL for description and UDDI for
registration and discovery.

Will IT shops have to change their approach to development to write Web services? No. One of the cardinal rules of the enviments today in particular is there will not be any wholesale change. You have to leverage your existing infra-structure. What that means is developers will continue to develop in a similar fashion. Some of the new development environments and IDFs (integrated development environments) from the BEAs, the Microsofts, IBMs Suns, Borlands of the world are such that you can still continue to use it as a development environment, but you can spit out now a standards-compliant Web service. You can have this plug-and-play, open-standards-based

sevice that you can then leverage. But if you start to lost it from a macro point of view, yet, there will be change... All of that policy for fail-word or the policy for security or the policy for logging gets encoded in my business logic today. What that means is whenever there's a change in the environment, I have to go back and make changes to the business logic itself. That is a problem today, and I think That is a problem today, and I think

through the use of Web services, through the use of Web services, through the use providing of patforms that we are providing per parties of the patients can specify the through the policies for things like first per to eccsurily perfuent to the business legic isself. And that kind of separation and policy-based specification at the appropriate time, I think, will underer p to for the development-side issues that the T departments are facious todos.

180 Web services eliminate the need for traditional enterprise application integration tools? Not, I don't think so. It's a very uneasy true between two bervices and EAL There is a role for Web services, and there is a role for Meb services, and there is a role for EAL toolsy, and you can't subsume one with the other. In the case where I need very deep senantic integration — highly transactional, where real time is not that critical — that's the place where I

In the case where I need to do quick integration, it doesn't have to be that deep. It's much more of a request/ response model, and it's more important for me to be open-standardsbased. It's more important for me to be lower cost. That's where there's been a lot of rapid change; that's where I would use Web services today.

But the reason why I say it's a nureasy truce is, over time, in fits even today, the EAI wendors are claiming to conform to Web services standards. They are in effect borrowing a lot of the conformation of the conformation of the services, and the Web services platforms wendors are poing through and forming standards for transactionality and so on, which is more the tradition at stronghold of EAL. So in the future, I think the distinction will be burred, as the conformation of the conformation of the contraction of the conformation of the contraction of the co

beeche Confusif product las . Our product is a software patterns as and otherwise server. If you will, that enables enterprises to gain that level of visibility, control sand adequability that they need to mater to delices their issues of the control sand adequability that they need to material their server is server, and people are calling the real-since enterprise. Our core platform is a Web services integration and management platform to enable an enterprise-class, such as the services integration and management as the platform to enable an enterprise class, such as the services integration and management as the platform to enable an enterprise class, such as the services integration and the services integration and the services are services.

In your product bloods for som to assort with products from the vanders? It but you much not only considerable filter you much not only considerable filter from the information players. We have strangels relationships with BMM, ELA, Microscoli, San, Mercury Interactive, for example. We address the deployment, management life cycle of Web services. We do not address the development If ley of Web services. You would use these partners products to develop your proteins products to develop your partners products to develop your partners products on the very payer existing applications have been provided to the web payers.

In order to deploy what we have, you would use one of these app servers. You would use an open-tandards, IDBC-compliant database, whether that be Oracle, SQL Server or DBC. We use the building blocks of what these partners are providing. We add value on top of that, and then we coexist with and partners with them on the whole development side. 9

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DMCA



The Digital Millennium Copyright

Act, approved by Congress in 1998, extends copyright law to digital content. It's intended to protect the technological locks that content owners can put on any type of copyrighted content to prevent circumvention.

BY PATRICK THIRODEAU THE RECORDING and movie industry saw the threat of technology like Napster who Shawn Fanning, the creator of the peer-to-peer file swappi service, was just a tot. Indeed, the road to the controversial Digi-tal Millennium Copy-

right Act (DMCA) probably began in 1975, when Sony Corp. introduced the Betamax VCR That was the start of a long eries of court battles and legislative fights over electronic duplication of copyrighted rial. But it wasn't until PCs were in wide use that

Congress acted in a broad way to extend copyright pro tections to the digital domain President Clinton signed the DMCA in October 1998.

Four years later, copyright holders are using the DMCA to successfully fight Napster-like services and protect their anticopying technol-

ogy. But the law has many critics and challengers, who say it impinges on the right of consumers to copy tent and creates a predicament for scientists conducting certain kinds of security

velops the means to crack a convright-protected CD and makes the technology for doing so available to others, the DMCA allows civil and legal

sanctions. That makes sense But it caused a problem for Edward Felten, a leading security researcher at Princeton University and his team when they circumvented the proposed Secure Digital Music Initiative (SDMI) watermarking technology standard for music, SDMI's creators had invited researchers to crack the technology, but when Felten sought to publish the results. be was threatened with a lawpuit from SDMI's recording in-

dustry backers. Felten fought back. The Electronic Freedom Founda tion filed a lawsuit challenging the prohibitions. But it never evolved into a test case because the research was conducted before the DMCA's prohibition on acts of circu

vention took effect in 2000. The suit was dismissed Felten says researchers are worried that their work will lead to lawsuits. "There is a very strong sentiment in the research community that doing research in (content protection) is dangerous," be says The DMCA has survived one important test. The Motion Picture Association of America (MPAA) sued Eric Corely, the publisher of 2600:

The Hacker Quarterly, when the magazine sought to post De Content Scrambling System code that circumvented DVD anticopying technology. arguing that First Amendment protection applied. New York District Judge Lewis Kaplan found for the

MPAA but saw legitimate arguments on both sides. "In our society, however, clashes of competing interests like this are resolved by Congress." wrote Kaplan. For now, at least, the courts

have resolved this clash in the DMCA's and plaintiffs' favor. For the motion picture industry and content providers in seneral Kaplan's decision was critical

If the publisher had prevailed. "the protection that Congress afforded content owners under the DMCA would have been eliminated." says Charles Sims, the New York attorney representing

By defeating that challenge and establishing that the anticircumvention provisions are constitutional, we preserved the security for copyrighted works that the DMCA afforded," be says. But the Corely case is hardly the end of legal challenges to this complex law or new efforts in Congress to revise it.

There will be battles for years Workplace Issues

to come

The DMCA also raises issues that can affect the sharing and copying of data in the workplace.

Suppose, for instance, that an employee copies several paragraphs of an article off the Web and disseminates it. The DMCA requires that those excernts include converiebt mannent information such as title, author, and terms and conditions of use, says Michael Overly, an attorney at Foley & Lardner in Los Angeles. He

advises companies to review their content-sharing practices in light of the DMCA. Another problem raised by

the DMCA is fair use of electronic data. If a copyright includes an anticircumvention clause that prevents copying, then anyone who breaks that provision could be liable upder the DMCA. If the same material appears in paper, the reader is free to copy it for personal use. The law creates different rules for the same material, depending on the

medium, says Overly. But for all the controversy surrounding it, the law will be hard to alter. "There is enough opposition to any change" to prevent it from happening. says Brian Mudge, a Washington-based attorney at Kenyon

& Kenyon, P to learn about in QuickStudy? Send your

WLAN Chase Reaches Endgame

Diligent sleuthing finally turns up carefully hidden rogue wireless LAN devices. By Mathias Thurman

or the past month or so, I've been struggling to find a way to locate and eliminate rogue wireless LAN access points (AP). This week, I believe I finally found an answer.

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I was thinking that APs, which typically function as a bridge between wireless and wired LANs, should act fike a traditional Ethernet bub. That means attached de-

means attached devices should broadcast their media access control (MAC) addresses to the AP, which should pass that information to the LAN switch. The switch then keeps a list of MAC addresses and the assointo

ciated LAN ports in memory.
With that in mind, I conducted a test. I used my AirMagnet handheld scanner to
detect an improperty configured AP. Mountain View.
Calif-based Air Magnet Inc.
includes a cool utility with its
scanner that let's you communicate with a detected APnicate with a detected AP-

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Associating to the AP was
simple, since — like most consumer-grade APs that show up
in the enterprise — the test
AP broadcast its Service Set
Identifier (SSED) access code
by default and had no encryption or other authentication
mechanisms, enabled

mechanisms enabled.
Not only was I able to communicate with the AP, but my
company's Dynamic Host
Configuration Protocol server
immediately assigned my laptop an IP address. Since this
address was internal to our
network, I knew I could open
a browser and reach our corporter intruser.

So I went to work, I went to

an area where I had detected a rogue AP before, booted up my laptop, connected to the rogue AP and used a browser to connect to our corporate intranse. Theo I logged isno one of our Cisco Catalyst LAN switches to search for my laptop's MAC address to the switch's content addressoble.

switch's content-addressable memory table. By issuing the command "show cam dynamic." I should have

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I found this one in a conference room — hidden above one of the ceiling tiles. The only indication of its existence was the telltale Ethernet and

I went in expecting to find an access point on the counter or under the conference

table. I didn't expect people to hide them in the ceiling. power cables stretching down one wall. I had been in this week before. How did I miss that? I suppose I went in expecting to find an AP on the counter or under the conference table. I didn't expect prople to hide them in the ceiling. I removed the chandestine device and began cleaning out the rest of the roque APs, which I found carefully hidden away to test labs and employees' office.

ployees' offices.

I should add that I was lucky, this method won't help if the AP has been set to not reveal the SSID, or in the event that encryption or authentication mechanisms are active.

Calculated Risk

That problem solved, I turned to our official WLAN deployment. We decided to go with Aironet 1200 APs and wireless PC cards from Cisco Systems Inc. But we'll manage and monitor the APs using Air-Wave Management Platform (AMP) from San Mateo, Calif.based AirWave Wireless Inc., not Cisco's Wireless LAN Solutions Engine (WLSE). Cisco's APs are fine products. but the WLSE software wasn't intuitive to use and could manage only Cisco devices. AMP can manage multiple vendors' APs, should we need to do so.

Initially, we were reluctane to deploy AMP because we have had bad experiences with start-up companies. But my network engineer and 1 spent a considerable amount of time in the lab with AttWave, and we like the product. I feel confident that the company will succeed, and I was able to convince management to

approve the purchase. Now it's just a matter of conducting a site survey to determine how many APs we'll need to provide full coverage, and initiating a deployment plan that includes training, help desk support, management, monitoring, policies

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ect is mostly behind me, I've been asked to put together a project initiation request for a deployment of a public-key infrastructure (PKD) My experunnes with DKI is limited the tried to roll it out at other companies in the past, but those projects quickly died once management realized the time, cost and resources required. I suspect that compa nies often implemeer PKI because it's a cool buzzword or because it's viewed as a point solution to a specific problem. In my experience, if it's not executed with proper planning and resources, PKI ends up forever in prototype stage

At a previous employer a few years ago. I attempted to implement PKI for e-mail and disk encryption. When we received the cost estimate of more than \$400,000, management decided that the risk to the information it wanted to protect wasn't worth the cost Instead, the company took its chances with my recommendation: Pretty Good Privacy (PGP) from Palo Alto, Calif.based PGP Corp. The product, which PGP secraired from Network Associates Inc. in August, offers the same basic features as PKI. And with a new version

as PKI. And with a new version and a new vendor backing it. PGP deserves consideration. It's been some time since The been exposed to PKI, so this is the perfect opportunity to evaluate the currect state of PKI technology and products. I hope that there have been

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curty Manager's Journels go online to

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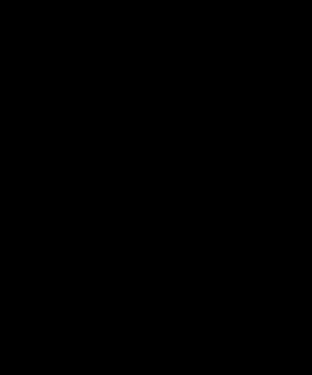
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PGP deserves consideration. It's been some time since I've been exposed to PKI, so this is the perfect opportuni to evaluate the current state of PKI technology and products. I hope that there have been some major technology and cost improvements that will make investing in PKI worth-while this time around.

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BRIEFS

IBM Ships New ersion of DB2

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ROBERT L. MITCHELL

Metro Ethernet Redux

EMEMBER THE METRO-AREA Ethernet hype of a few years ago? Like most great ideas, it was based on a simple notion: Since nearly all data begins and ends its life in Ethernet frames, why not run Ether-

net across the metro network rather than using services based on ATM and

Sonet? Corporate IT understands Ethernet, And, IT was told, services based on metro Ethernet would be half the cost, provision faster and allow bandwidth to be "dialed up" virtually instantaneously and in more granular increments than Sonet-based services

The idea of metro Ethernet resonated with corporate IT but struck fear into the hearts of the incumbent local exchange carriers (ILEC), who preferred to squeeze every last dollar out of their multibillion-dollar ATM/ Sonet infrastructure investment, And who could blame them? After all, some 70% of their revenues comes from voice traffic, which Sonet excels at transporting efficiently and reliably, says Burton Group analyst Dave Passmore. But their future growth de-

pends on servicing the growing need for data networking services as well. While the ILECs considered ways out of this dilemma, including putting a friendly Ethernet interface in front of their Sonet infrastructures, start-ups such as Yines and OnFiber Communications jumped in and began offering native metro Ethernet services. They delivered as advertised, and the pressure was on.

That is, until the telecom bubble burst. Then the ILECs retrenched. And most of the start-ups - after burning through hundreds of milli of dollars and overextending themselves in a mad race to build metro network infrastructures - suddenly went into bankruptcy. The ILECs breathed a sigh of relief, and metro Ethernet faded from the headlines. IT professionals gritted their teeth and went back

to provisioning those Tls. A few brave souls began lighting their own fiber for some interoffice links, but the cost of last-mile internects and the complexity of building and managine a multipoint fiber petwork over a metro area left all but the bravest IT organizations on

the sidelines. Now metro Ethernet is re-emerging. along with a new 10 Gigabit Ethernet standard that offers unprecedented scalability. Yipes is emerging from bankruptcy with scaled-back coverage and a more realistic business plan. OnFiber has gobbled up weaker competitors. And the ILECs are prom metro-area Ethernet services. But what

you see may not be what you get. Some ILECs are experimenting with metro Ethernet services using carrierclass Ethernet switches. But most are nushing "next-generation Sonet," hoping that if they can present an Ethernet interface on each end, users won't care how the data is transported in between.

Putting an Ethernet front end on Sonet makes it more transparent to end users. But when it comes to delivering on the full benefits of metro Ethernet, users may discover that the emperor has no clothes. These systems simply move the Sonet entrance rump from the customer premise to the carrier's point of presence and require expensive retrofits to the carrier's equipment. And bendwidth allocation is still less efficient than with native Ethernet

(although at least one equipment ver dor is said to be working on this). So it may be easier to connect, but you'll likely pay more for these services than

for a native Ethernet design. Certainly, Sonet has its strengths. Proven reliability and very fast failover rates make it attractive for traditional voice traffic and mission-critical applications such as real-time transaction processing. Although vendors have developed technologies that let metro Ethernet meet this challenge, the products aren't yet in wide use. And the Metro Ethernet Forum is still working out a common set of carriererade service classes, management specifications and service interoperability standards. Much of that could be ironed out some time in 2003.

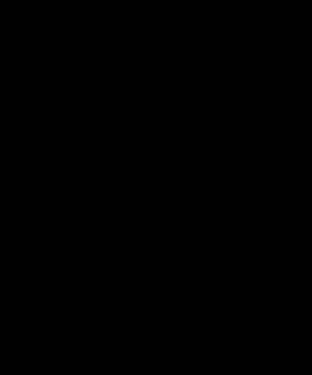
But for many data petworking applications today, metro Ethernet would be the best alternative - if it were widely available. If users wait until carriers have fully depreciated their Sonet infrastructures, it could be years before metro Ethernet becomes ubiquitous, analysts say.

But corporate IT organizations have the power to speed up that process by demanding native metro Ethernet services now. That means seriously considering services offered by componies such as Yipes, local cable operators that are lighting fiber and early ILEC offerings. The gamble of going with smaller providers can be mitigated by lower service costs and by the establishment of lower-bandwidth backup services from the ILECs, which should be clearly told that they've been relegated to second banana in those

No vendor wants to leave business to its competitors. The ILECs will have an incentive to respond more quickly, lest smaller, nimbler vendors eat their lunch. Either way, in the lone run, corporate IT wins.

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BRIEFS

IBM Ships New Version of DB2

BM last week announced that it is shipping Version 8 of its 082 ne product for use on Unix, Linux and Windows. The costs, a self-confe ity and new as nt features to cut oc ation costs. Pricing for Versi 6 starts at \$7,500 per proces for the Workgroup Edition and \$25,000 per processor for the

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TCO: Flawed but Useful

Total cost of ownership analys are intended to provide a complete nicture. But because certain pieces are still missing experts advise using it as merely one of several metrics in determining IT value. Page 52



Your Mission: Network

Networking may not always come urally in the introverted world of IT, but if you can manage a project, you can network effectively. The payoff is a ready group of helping hands when you face a thorny technical or career issue. Page 54

Healing Touch of a One-Company View

Actna's new Web-based executive management information system gathers financial and operationa data from various sources and is playing a leading role in the health insurer's return to profitability. The key is giving top managers a "one-company view" of the sprawling organization as well as fast turnaround on complex financial information. Page 58

Who Moved My

HINT: Check with sales and marketing. By Barbara DePompa Reimers



T ESAB NORTH AMERICA. Tim Luce, director of appli cation development, is denined to "liberate corporate data from the IT bottleneck," and turn IT workers from hard-core coders

into savvy business people. His ultimate eoal: to have IT at the \$1 billion supplier of welding and cutting equipment provide business users with tools and training so that users themselves can retrieve and manipulate the data they need to make better asiness decisions. "The genie is out of the bottle, and in some cases there are end users who are as good as any

IT professional," says Luce. Two key forces - the slow economy and the trend of technology permeating business to the point that all jobs are IT-related - are fueling a perceptible shift in the world of IT jobs, ITsavvy business users are picking up some of the work that was previously done strictly by IT workers. Increas ingly, sales, marketing, human re-

surces and other traditional busines and administration jobs are expandi to include technology-oriented task such as data mining and other forms of corporate data analysis, as businesses strive to do more with less. To get the job done, the business units are ado ing sophisticated software took that in some cases replace some of the work

formerly relegated to IT departments. On the flip side, the same forces are also stretching the boundaries of traditional IT jobs, such as database analyst and computer programmer, to include project management and business valne skills

The upshot is a fundamental change in the nature of IT work, particularly for highly technical empsoyees, who

must find ways to shift their focus to business and interpersonal skills to ensure job security "When I started, all employers want

ed to know was how well you could code. Now what's important is how well you manage technology projects," says retired Elf Atochem North America Inc. CIO Bob Rubin. Rubin now heads Huntington Valley, Pa-based Valley Management Consultants. which advises companies on IT strategy and operational excellence.

The growing acceptance of IT *outside the glass house" is a further step in IT's evolution "from what was once considered a sacred role as technological high priest, doling out IT resources to businesses without question from sess execs," Rubin says.

ESAB, for example, is working to turn programmers, engineers, and eyen some leading salespeople into skilled project managers who understand how to manage deadlines, allocate resources and minimize time to market. Luce has even earned special certifications for project management

in recent mountly At the same time, the company is providing business users with software tools, such as Cognos Inc.'s Powerplay and Impromptu, as a means of remov-ing IT from the report-generation

DITTOPES. As more companies make sim moves to bolster the IT self-sufficiency of business people, the big question becomes, "Where does that leave IT

Analysts, recruiters and out-of-work IT executives say there are defin changes afoot in where skilled IT

workers should look for jobs, and what they should do to hold on to or and advance their current technical positions (see article artight). There are also some specific skills they need to help

ensure job security.
IT professionals must "add business value and focus on how they can help the company operate better, faster and cheaper," says Phyllis Klees, a partner at Deloitte Touche Tohmatsu's Human

Capital Advisory Services in San Jose.
This is especially important because
as Klees and others explain, workers in
other departments are being called
upon to add IT-related skills — or at
least learn to use sophisticated data
analysis and customer relationship
management (GRM) tools that can di-

rectly affect the bottom line. Klees maintains that the cor economie recovery will likely be slow and gradual, so organizations that hire new IT employees will increasingly move away from heads-down programmers or "commodity coders" as slie calls them, and instead hire more seasoned IT professionals who have provided business value in their prior jobs. Often the new jobs will carry management-focused titles, such as director or supervisor of special projects or manager of network services. The positions may even exist entirely outside the traditional IT department, residing instead in, say, sales or marketing and perhaps focusing on CRM-related data analysis.

An IT worker's next career move should be clear, says ESAB's Luce: "Evolve, Stop believing and behaving

as though IT is the only resource that can complete IT-related tasks." It would also help to brush up on or learn skills in key business areas, such as sales, marketing, business develop-

ment and customer service.
IT executives must strive to become "collaborative associates," which means they must learn to work with increasingly tech-savry users in all siteas of the business, "providing used ance, communicating, listening and fering insights or trade-offs for each technological investment," says Robin. IT workers can increase their value and help insulate themselves against future layfed by making personal con-

future layoffs by making personal connections with business department heads and by learning more about how their companies operate so they can offer practical suggestions for improving performance, speeding processes and reducing costs.

Analysts advise workers to find ways to get invited to business project meetings and to volunteer to join crossfunctional teams to both learn more

and to provide valuable IT insights.
"It's absolutely invaluable to the VP
of sales to work with someone viewed
as a data warehousing expert, with crucial experience working on the compoy's CRM dara." Rices notes. "But if an
IT person solely focuses on the data
warehouse and not the company's
CRM needs, be or she is little more
than an expendable commonly;" 8

DePompa is a freelance writer and editor in Germantown, Md. Contact her at bdepompa@comcast.net.

HOW TO LAND THE

you're out of work and booling for an II you by the best way go et an employer's alwrition is to highlight the business probme you've solved by previous IT position of your planning and organizational ells. Experts enhance emphasizing project as completed on them and order budges one related to manigating cross-function control teams are manigating cross-function

Business, reseappenent and communication shifts should melter as much as how enerry programming lampurage, you flower or how many Frushand maniplicus shifts you possess. Although shifts such as the communication of the

cost servings besed on specific projects. "So what if you know their of that programming languages, how can you halo o company do mose with less?" That is on of the languagestion of director Jan Masadis. If professionals seeking work at M this Service Co., a reministrance and sastruction services company in Tutas. Oh

The answers he gets from candidate vary videly, ranging from blank stores in other interes about bust casher interes convenzations about bust ness needs and regarderments. The harmonic halp me decipher whether an job candidate really understands the coopy of bustwess needs, "Nuclei age," Madel, who stored his convey 20 year.

Maufel, who started his career 20 yi ago to accounting and has worked to if wore then a decade, saye, "I take me then an shifty to calculate to be an accountent, and more than an ability to o to be an IT professional."

Reyeard the Clevellads.

Don't lively your search to the technical cleanifieds, you should also stem job boards for positions in marienting, solve teining, menufacturing or sides. Analysis and morations say you should search to new breed of job that havenages technically search and the state of the same parties state.

It's not yet clear how widely such jobs are being advertised, forware. Because of today's "do more with less" expensive, many businesses are likely to take an existing tech-savry employee with a recogand develop that employee's technology style, or at least train that person to use

Analysis say entroverted people who understand hardware and software technologies are excellent candidates for sales positions. Out if you haven't the stormeth for sales, consider isobrical support, a job category on the rice, analysis say. The

with IT training and the fortitude to deal with customers who present widely very rig degrees of technological experience. "If you considerate with IT stells are can fortable dealing with customers, their conditions with many heigh fame," says Bill Columen, senior vice president of com-

at Training, Stay Flexible or some job conditates, melting empl ant outside the IT flatd may not recent only be the best step, says Jacon

Medick, director of meritaling at Uthandate, team-based Dair Ne, which opersises for collese IT bit shill Dice come. If you want to remain in IT and you have the inrectal ability to skey out of verify, which get more IT-operate transpire to less procompetition. Specifically, employers are sharing a keaple from Italian produces having a keaple from Italian produces of children and inverse sharing a less of chilects and indervise architects, accordchilects and indervise architects, accord-

> Most of all, recruiters and CIOs say, y Restale, If you have the basery of a thcold custom, you should build shifts of develop rachs interests. Phoject manement advantion is a long to moving upyour-value," says Columen, because "It's

of project to manage others doing it. Those who must be not sense the in the scope of first near-his, senses set stills and separatories, and then controlled the sense that the specific dis. Column time your steams should tree as a chandle to reatch the neads repided in a job positing. The closer you are match your shifts to the businesses seeds, to the best of your horsest ability.

- Barbara DePotripe Reimoc

Career Advice for IT Purists

CIOs, AMALYSTS AND RECRUITERS say IT jobs will increasingly shift away from traditional colour programming to more advisory, consultative rotes designed to assist individual business de-

The se-called pure IT jobs will thely exist primarily in scientific settings and focus on research and development, pushing the evolution of IT theory and incombadge. Think undwantition and commercial computer(IT engineering laboraterial)

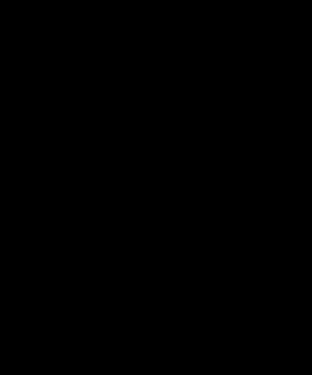
Trees these IT asports will come technological advances and new applications to used by technology companies to sarve the IT needs of businesses." says John Challenger, CEO of Chicago-based recruiting and market research from Challenger, Nery & Christmes Inc.

Another option for IT purists, who need to dedicate themselves to continuous learning about leading-edge technologies, is to get involved in organizations that develop industry standards another index technologies, and

targeted areas of expertise, such as data bases or enterprise comparing software, recruiters say. In companies, the bulk of pure IT jobs will involve work in software integration and computing infrastructure, Challenger

predicts. IT workers will mainly be responsible for linking together off-theshell applications developed by outside weeders. Challenger says he has seen idence of this trend with companies do voting some IT personnel to infrastructure and internation beams.

Detates necoules sections



workers should look for jobs, and what they should do to hold on to or and advance their current technical positions (see article at right). There are also some specific skills they need to help ensure losh security.

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Is your enterprise network on the right track?

Truth is, your enterprise network runs on multiple tracks. Hopefully headed in the same direction. You know where you need to go – local to global, legacy to leading edge, separate systems to an integrated platform.

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TCO: FLAWED But useful

Total-cost-of-ownership analyses are intended to provide a complete picture. But certain pieces are still elusive. By Thomas Hoffman

the use of total cost of ownership (TCO) as a financial metric is undergoing something of a rebirth. IT managers are being asked by top brass to prove that their shops are low-cost, best-in-class providers when it comes to acquiring. deploying and managing everything from Palm devices to mainframes. But critics are quick to point out flaws with the TCO model - especially for IT and business leaders looking to measure value. The concept of TCO. originally developed in 1986 by Gartner Inc. for PCs, has evolved to embrace all facets of distributed computing, including software, servers and

TH COST PRESSURES being

applied to every corner of

corporations these days.

TCO, which includes the total costs to acquire, maintain, upgrade and dispose of a piece of computing equipment over its lifetime, "has no way to measure or maximize henefits, only to reduce costs," says Chip Gliedman, a Norwalk, Conn.-based analyst at Giga Information Group Inc.

Information Group Inc.
Gliedman and other analysts have
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For example, it's frequently used to
benchmark the costs of managing
a vendor's application or piece of hardware against the costs for industry rivals' products, which isn't always an
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product can have a low cost of ownership but not be the best managed.
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belp desk, maintenance and replacement costs, all of which are part of TCO, notes John Jordan, a principal at Cap Gemini Ernst & Young in Cambridge, Mass.

"When I talk to people on this topic,

I'll ask them whether they would go with the heart surgeon with the lowest cost or the best track record," says Ian Campbell, president of Wellesley.

Mass-based Nucleus Research Inc.
A frequently lobbed criticism about
TCO is that the methodology sin't
comprehensive enough and typically
fails to include soft, or hidden, costs
such as the training required when

new users are added to a system. Even Bill Kirwin, the so-called father of TCO, acknowledges that the model isn't flawless. "I'm aware of those that have said that the model is flawed, and I'm the first to admit that the model isn't perfect," ayes Kirwin, a Gartner analyst. "But we've evolved the model over the post I'v gears, and it keeps set-

ting better all the time."

For instance, Stamford, Conn.-based
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Garmer has added a "complexity Index" that factors the complexity of the business environment being supported into the technology ownership costs, says Kizwin. "So if you've a Wall Street bro-kerge, spending \$15,000 a year per seat to keep those stations operating and the traders happy might be acceptable," given the enormous profits that stock trades can go present for a firm, asys trades can greate for a firm, asys; "cal worker in Houston, \$50,000 per seat probably wouldn't be acceptable."

Other Hidden Costs TCO analysis also typically fails to include the hidden cost of "casual main-

tenance, "such as the amount of time workers spend helping one about troubleshoes PC problems. And "people underestimate the cost of building something and underestimate how long it will stick around to haunt them," says Alistair Davidson, a manging partner as Eclicktrick Corp., a Palo Alto, Calif.-based consultancy. Cost-centric metrics such as TCO also "position IT squarely as a cost center, and thairy not a good place to

So, why should companies use TCO. One reason, asy some practitioners and analysts, is to places the demands of CEOs and other top executives who want quantifiable proof that their organizations? If activities are heing run as efficiently as possible. This is particularly relevant as growing number of corporate chiefs are weighing the porticital costs savings of outsourcing IT assertion to the chief party service providers like IBM and Electronic Data Sweeness Com-

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Another reason for conducting TCO analyses, say many consultants and practitioners, is to include those figures he Obvious Costs

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Training new orders in other calculations that are more ca-

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"TCO needs to link to ROI," says Stephen J. Andriole, a professor of business sechnology at Villanova Uniter versity in Villanova, Pa., and a senior consultant at Arlington, Mass-based Catter Consortium. On its own, says

Cutter Consortium. On its own, says Andriole, TCO doesn't answer questions like what contributions those devices are making to a company's top and bottom lines. "We do find [TCO] useful, but it is

[merely] one point of reference," says Margie Farber, senior vice president of business area services at governmentbacked mortgage company Freddie Mac in McLean, Va. "We do TCO on all of our projects,"

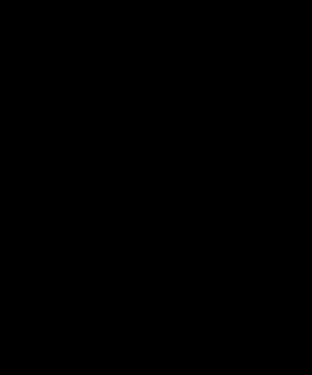
We do ICU on all of our projects, says Malcolm Fields, CID at Muscatine, lowa-based office furnitum manufacturer HON Industries Inc. "We don't care so much about the buy-in costs, but how much it's going to cost us over the long term!" for those projects. It's also important to consider ancillary costs when developing TCO analyses, such as the impact that the addition of a transaction-intensive apdication might have on network traffic.

and downstream networking costs, says Howard Pigee Jr., director of IT and CIO at Corning Life Sciences, an Acton, Mass-based division of Corning Inc. The bottom line: Performing a true TOO analysis means fitting together lots of cost pieces, many of which can be scattered well beyond IT. The trick is finding and including them all, b

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always come naturally in the introverted world of IT, but if you can manage a project,

you can network effectively. "Tech folks have to deal with this the same way they would plan to do a system." says Fran Dramis, CIO at BellSouth Corp. in Atlanta, Here's how:

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involves finding, making and maintaining the right connections.

THE NEED: Talking with IT people inside and outside your company increases your understanding of technology as well as its tactical and strategic uses. savs Roger Gray, CIO at Pacific Gas & Electric Co. in San Francisco. Talking with business people helps you appreciate their needs and gives them a better feel for FE. "When they think of FE. 1 don't want them to think of a server," he says. "I want them to think of 'my friend Roper who can solve my problem," "

Networking serves other purposes,

adds Dramis. Building relationships with project sponsors and mentors is key to advancing your career. And getting your talents known in the marketplace is just plain smart. "It's part of life security vs. job security," he says.

THE PLAN: "You need to find out who are the people you need to learn from. make contact and create a dialogue. not in a phony way but in a genuine way." Dramis says.

"Think in terms of 10 to 20 people that you actively work with," says Marsaret Schweer, director of human resources for IT at Kraft Foods Inc. in Northfield, Ill. Schweer's network includes her CIO, executives at the Chicago-based Society for Information Management, IT and human resources colleagues at other companies, and since her background is in sociology sociologists. "That's how I make sense of what I see," she explains

RESOURCES: Understand how your personality affects your networking style. "I'm a borderline introvert," Grav says "I don't like his crowds, structure and formality, so it helps me to keep things smaller; coffee with someone."

ACTIVITIES: Seek a mentor. Have coffee with a key colleague. Attend a conference or seminar and meet people. Talk, have lunch, 50 out for a been Also, be alert to serendipity. Gray says he has made some great connections through the sheer luck of being at the right place at the right time. "You have to plan for the structured networking but be open to unstructured," he says. For example, if you find your self on a cross-functional team with business people, get to know that smart guy in marketing "Take advantage when you see peo-

ple in different venues," Dramis adds. His network has expanded through nteer work at the local United Way chapter which includes a technology group facilitating networking while serving the needy. "Since it fits in with your own values, you establish a trust level in an accelerated way,"

MEDIA: Networking has to be done in person, at least in the beginning. "I can talk to friends on e-mail, but I spent years establishing that trust," Dramis says. "Until you get there, you can't use electronic modis?

ORS: Don't confuse a one-time char with networking, says Gray, That can do more harm than good because you can

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misunderstand the business context.

QUALITY CONTROL: Nurturing relationships takes commitment. "You can't non into people's offices once a quarter and think you've done it. You need deeth and quality of conversation," Schweer says. It takes ber at least 30 interactions to get quality relationships for effective networking. For Dramis, the frequency varies: For career networking, twice a year may be enough. In the peer environment, once a week may be sufficient; in the external tech community, once or twice a year; and in the busi-

ness community at least once a month. PAYOFF: Networking takes care and commitment, but the payoff is a readymade group of helping hands when you face a technical, business or career issue. And besides, you may make some friends along the way.

Melymuka is a Computerworld contributing writer. Contact her at kmelymuka@earthlink.net.

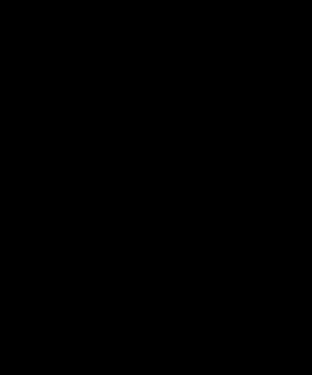
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THE GOAL: Networking is building human connections that broaden your understanding of the working world need it. It's more deliberate than friendship but equally reciprocal. It

> Your MISSION

Professional networking isn't impossible if you treat it as you would any other IT





NETWORKING may not always come naturally in the introverted world of IT, but if you can manage a project, you can network effectively. "Tech

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ARNING AN MEA degree means many abours of classes and studying, personal sacrifices and stress. Is it worth it for an IT professional to pursue such a degree? Yes, according to some who have done it. Many IT professionals have been focusing more on business, a trend that began in the 1990s. In a recent Computerworld survey, nearly 30% of the 6,408 respondents with

17 I'm heard more because lunderstand the language and can present technology in husiness terms

bachelor's, moster's or Ph.D.s said their degrees are in business. The number of IT man ers who have earned or are studying for MBAs is rising, says Mark Polansky managing director of the advanced technology practice at executive search firm Korn/Ferry Internati in Los Apseles. 'As the demand error for business-savey CIOs, there will be

an ongoing increase in the number who hold these degrees," he says. Sharon Mandell formed a small software company early in her career. pany did well and in fact grew to the point where Mandell felt she didn't have the experience to run it. She closed the business and in 1998 joined Tribune Publishing in Chicago as director of advanced technology. Mandell was soon promoted to vice president and chief technology officer.

The bachelor's degree Mandell had earned in computer science had prepared her for technology issues, but not for business functions such as measuring financial returns and planning bud-gets. "I'd go to business meetings and not understand the reasons behind ions," she says

When Tribune Publishing in 2000 offered to pay for an executive MBA program at the University of Chicago and provide flextime to attend classe Mandell jumped at the

chance. Executive business programs enable people who already have experience as corporate managers, such as Mandell, to continue working while they study.

Mandell attended classes every other weekend, six hours each on Pridays and Saturdays, for 20 months Studying and homework took two to eight hours per week. After receiving her MBA in March, Mandell felt much better-equipped to make business de-cisions. "Some of the issues are not necessarily intuitive (to technology gers), such as bow a decision will look on Wall Street, negotiating contracts and measuring returns," she

says. "I gained a much broader view."

Mandell, who in June joined San

Jose-based Knight Ridder Digital as

CTO, doesn't think the MBA has had a major impact on her salary. But Mandell says she has gained respect from senior executives who previously viewed her as "just a technologist." In meetings, "I'm beard more

because I understand the language and can present technology in business terms," she says. IT projects are more likely to get appr because Mandell can better quantify

the potential business value. Anyone thinking about an MBA pro gram shouldn't und school will affect his personal life, family and work, Mandell says. It was particularly challenging for Mandell, a single mother, who had to balance studies with priorities such as caring for her daughter and doing her job well. She still wants to run her own company and says her business knowl-

edge will help her when she does. Gary Baxter, 46, also aspires to he a CEO. Baxter was a project manager at Andover, Mass.-based software vendo ISI Systems Inc. (now CGI USA) while he studied for an MBA at Bentley Col lege in Waltham, Mass. He had earned a degree in management informati systems before launching a career in mainframe application development and he saw an MBA as a way to meet his goal of becoming a business leader

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PAUL COSTELLO,

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ology person my entire career," Baxter says. "Companies were looking for technology people who had business skills, and I wanted to get that experience." He attended night classes for three years, with ISI paying the tuition. Bexter completed the program in 1992 and then worked as

a consultant at ISI. Four years later, he was offered a CIO post at Maine Employers' Mutual Insurance Co. in Portland

Baxter says the MBA belped him land the job because the company wanted someone knowledgeable in all aspects of business. "I can go into any meeting and feel confident that I'll understand the business issues they're talking about," Baxter says. "I can hold an intelligent conversation with year dors, venture capital firms or CEOs." Baxter's business knowledge ma him a more effective CIO. For example, when he's talking to a marketing exec-

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utive about how IT can support a campaign, Baxter understands more clearly what marketing hopes to accomplish and how to reach the target

Although Baxter says be didn't use the MBA to negotiate higher salaries, he acknowledges that achiev ing higher pay through

career advancement was e of the incentives for getting an MBA. The biggest incentive, though was to get the background to take on more challenging positions. "There's a good chance I wouldn't have this job if I didn't have an MBA," he says. "I'd probably he working as a project max ager or senior technology consultant and he earning half as much."

Baxter recommends that IT pro sionals consider going for an MBA if they hope to be executives. "The earlier in your career you can get it, the better," he says. "As you get older, it becomes more difficult* to find the time

or energy An MBA can also help people committed to staying in IT. Paul Costello earned an executive MBA from the University of Miami while working at the university as director of IT administration and budget control. The university paid for the program, in which Costello took classes on Saturdays for

45 weeks over two years and studied about four hours each weeknight and eight hours on weekends. There was immediate

payback, "I gained insights about business and finance that helped me do financial analyses of proj ects and IT products, Costello says. He says his onsibilities and salary increased much more than they would have without

the degree. Costello became more involved in functions such as negotiating contracts with IT ven dors and developing re-

He has stayed with the univers because he considers the work challenging and rewarding, largely because of the added responsibilities. Having an MBA "will give you insight into the organization you serve, because practically every organization has a business element to it," Costello says, 9

Violino is a freelance writer in Massapequa Park, N.Y.

IT leaders are still signing up for those MBA programs, and companies are still paying the way. BY BOB VIOLINO



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@ business is the game. Play to win."

Aetna Inc.

ISMESS CHALLENGE: It took a hall month for senior executives to receive financial data compiled from the previous month.

SOLUTION: In-house development of an executive manage-ment information system, which was fully launched early this year.

TECHNOLOGY: Crystal Enteronse 8.5 and Crystal Reports 8.5, ich entract and present a une fed view of 156B of francial and tional data from 50 differe

lete sources that leed into SQL Server and IBM DB2 databases RESULTS: After four quarterly losses. Aetha has posted three Itable quarters and is on track show solid profits for the full

year, thanks in part to executives ng access to granular finen-information within 12 to 14

S AN AGE-OLD PROBLEM CEOL financial executives and other corporate leaders need timely and acrate information on sales, market conditions and other operational data to help them make sound business decisions. But all too often, the information they have is

either outdated or incomplete. Poorly designed financial and exe-tive information systems are behind some of the problems. A study released in August by New York-based Cap Gemini Ernst & Young revealed that although 81% of the 265 chief fi-nancial officers surveyed deemed accurate revenue and earnings forecasting to be a high priority, 63% of them said they're saddled with inadequate budgeting, forecasting and decisionsupport systems that hamper their ability to get the job done. Aetna Inc. took a sledgehammer to

that problem. In May 2001, the Hartford, Conn.-based health insurance and benefits giant launched an in-house effort to develop an executive management information system (EMIS) aimed at pulling critical financial and operational information from disparate systems and channels throughout the mpany so that executives could react faster to changing market conditions. Before the Web-based EMIS was rolled out earlier this year. Actna didn't have a formal automated delivery system to analyze financial information, says David Oster, vice president of finance at the company's Dallas

office. Oster reports to Actua Senior Vice President and CFO Alan M. Bennett and is the business owner for the EMIS. In addition to providing manement with a "one-company view" of the organization, the EMIS is designed to provide "structured accountability" across the firm's operating

units in the U.S. Oster says. The push for greater accountability within Actna "is certainly consistent with their strategy," says Greg Crawford, a financial analyst who covers ton Inc. in New York. Prior to implementing the EMIS, says Crawford.

Aetna at financial adviser Fox-Pitt, Kel-Aetna "wasn't set up well to analyze the performance and profitability of

various products." Lacking meaningful data to make those decisions, Aetna's ment "was basically flying blind," he says, adding that "there's a real push (within Aetna) to get better data at local levels for management to make more effective decisions."

There were other business drivers behind the development of the EMIS. Before, it typically took Aetna a full month to tabulate monthly financial information from dozens of offices, using a combination of Excel spread sheets and Word documents.

Now the Web-based EMIS makes it possible for Aetna executives to drill wp on financial information within 12 to 14 business days instead of waiting another two weeks for the reports to be cressed. "That acceleration has helped management look at the market and react to pricing concerns and trend concerns, such as medical costs in the market," says Oster, Executives can analyze specific information using software filters that can break down financial and operational information based on busi-

ness units or geography, or into custo-

7 gone through a

substantial customer loss, and this system has helped us to focus on profit-

and-loss vigilance. DAVID OSTER, VICE PRESIDENT OF mer sorments, he says.

The system is based on Crystal Enterprise 8.5 and Crystal Reports 8.5 software from Crystal Decisions Inc. in Palo Alto, Calif. The software extracts ISGB of financial and operational data from S0 different data sources, such as general ledger and claims systems, that feed into SQL Server and IBM DB2 databases. It then presents the information to managers in a unified view. says Louis Ursini, head of data man ement and services at Aetna in Midetown Conn.

Aetna began piloting the system in July 2001 and populated the system with 2002 planning information in September 2001 before the system became fully operational at the start of

this year.

Financial Impact

Uraini and Oster say it's hard to pinpoint the financial impact the EMIS has had on Aetna's bottom line. But this much is clear: The company lost money in all four quarters of 2001. During that time, management had said that we didn't have as good a view of our businesses as we should have," says an Aetna spokesman. But the company has seen a profit for the first three quarters of 2002. "We're doing much better this year than in the past because of systems like EMIS that give us a much better understanding of the fundamentals of our

business," he says. Actns announced on Oct. 9 that it's expecting full-year operating earnings to come in at about \$2.20 to \$2.25 per share, considerably higher than the \$1.70 to \$1.75 per share company executives had previously anticipated.

Cost-cutting moves, more stringe reviews on capital expenditures and increases in customer premiums have benefited Aetna and other health providers this year. For instance, average health care costs jumped 13.7% for 2002 and are expected to leap another 15.4% in 2003, according to a report released last month by Lincolnshire, Ill.based Hewitt Associates Inc.

But Actna's customer base has durindled, partly because of its decision to sell its financial services and interna onal businesses to Amsterdam-based ING Groep NV in December 2000, and because of customer defections to competing health care and benefit plans. Still, more effective decisionmaking tools such as the EMIS have helped bring Aetna back into the black.
"We've gone through a substantial customer loss, and this system has

helped us to focus on profit-and-loss visilance," says Onter, 9

A new reporting system that gathers financial and operational data from various sources is aiding Aetna's return to profitability. By Thomas Hoffman WebSphere software

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BRIEFS

Northrop Unit Names CIO, VP Horthrop Grunnman Corp. in New-

port Mews sector recently appointed Alene Kaufman as vice president and sector CIO. She reports to Teen Shelman, Morthrop Grumman's corporate CIO, and to Tern Schievelbein, president of the Mewsent Hews sector.

Kaufman was program director at the Integrated Systems sector in Melbourne, Fla. She has held several leadership positions, including manager of software engineering.

Morthrop Grumman Newport News in Mewport News, Vs., is the nation's sole designer, builder and refueler of nuclearpowered aircraft carriers.

Fanzilli Joins Board Of Focus Ventures

Focus Westners, a venture capital firm in Palo Alto, Calif., rocently amenanced the appointment of Frank J. Fanzilli to its advisory board. Fanzilli is the farmer CSI of New York-based Credit Sations Credit Sations Final Boston Corp. The advisory board haple indentify investment opportunities and evaluation opportunities and evaluation commonities technologies.

Kaiser Taps Former CIO for IT Project

Bruce Turkutez recently joined Oakland, Calif.-based Kaleer Permanente Health Flan Inc. as vices president for the Clinical information System project, an effort to produce automated medical records for the health care giant's 8.4 million members.

The project is intended to make patients' medical information accessible from any point of service - in their primary physician's or specialist's effices or in different facilities. The rollout is expected to be completed in sense.

Turkstra previously was deputy CIO at Pricewaterhouse Coopers, Transamerica Life tosurance Co. and Anderson Worldwide SC. TOHN BERRY

Taking a Measured Approach to Sales

S VENDORS MAKE MORE OF AN EFFORT to measure and communicate the economic impact of their products in customer organizations, we should see their sales focus shift away from product and service

better off financially from the purchase of their products. This shift is subtle but not trivial. "ROI selling," as this approach is called, should add clarity to technology investment decision-making, Pethaps.

I present to you Exhibit A. a customer testimonial displayed prominently on one vendor's Web site, most likely dreamed up by the folks in marketing — er, I mean communications: "X offers a flexible and scalable solution that allows for

sable solution that allows for multichannel customer interaction either through traditional or modern Internet methods. It can be implemented quickly and offers us the level of support we need to move forward."

Here's Ephilis IR from another were

Maybe it's my public-school education, but I have trouble understanding what these vendors do. As impenetrable as this propaganda is, the greater offense is selfing features as benefits. Neither example provides an explanation of how these products and services will help companies save or make money. If postimestanent meamake money. If postimestanent mea-

features. Instead, they'll emphasize how users will be better off financially from surement in the name of the purchase of their products. This shift is subtle but not trivial. *RO! selline." as

Enter ROI selling, whose simple proposition is that the sakes appeal of any technology must revolve around quantifiable benefits or the positive operational impact it has on user companies. Vendors are training their sakes forces in the rudiments of capital investment decision-making while unleashing business summbore, story whose view hose into customers.

tomer organizations with the mission of collecting empirical data around key performance indicators. By what percentage is this technology increasing worker productivity, reducing time to problem resolution, reducing days in accounts receivable and in-

time to problem resolution, reducing days in accounts receivable and increasing the rate of inventory turns? Real-world financial impact data speaks the same language as CFOs, and this can only improve the power of a vendor's sales message.

of a wendoor's sales encesage.

If ROI selling is enceuted honestly lift ROI selling is enceuted honestly and accurately, this entire effort is a good ofting, a rend IT buyers should welcome. A vendor knowledge base might bring to light sources of economic value in the technology that the buyer might have overlooked entirely. Such data might also confirm the ventor of the confirm of the properties of the buyer's industry, Radically, a vendoof's post-industry, Radically, a vendoof's post-investment measurement exercise

might inspire the customer to build its own in-house, ongoing measurement capability, both to validate the original business case and to gauge continuous business process improvement.

Alas, ROI selling is about selling. So in the name of due diligence, prospective IT buyers should meet this trend with all the lights trained on it. The

following are a few pointers:

Confirm data validity by talking to customer references willing to confirm what the vendor found. Determine how the vendor arrived at its findings.

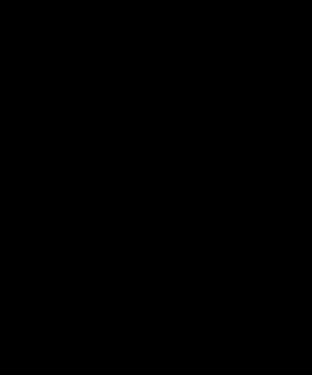
Figure out how the vender will headle inaspillet. Any wender that says its technology will help build your brand had better be able to show how brand equity has either increased other companies' shareholder will be of inne. Otherwise, discount it. The same goes for strategic advantage' data. This suff is clearly important but ditherefore, a potential distraction to clear decision—making.

■ Benchmark vendors' empirical data against outside findings. Spend money on a more unbiased collection of performance data from one of the analyst bouses and lay it oo top of what the vendor has found. Consider the fascinating pricing and

contracting positions are described in a vendor's willingness to re-engineer is entire marketing apparatus around economic value data. Are vendors willing to put part of their fee at risk based on proven measurable returns? Value contracting inst new. RO tracking may raise vendor accountability of the put of their fee at risk based on proven measurable returns? Value contracting inst new. RO tracking may raise vendor accountability on the hights requiring on yopen tanks during the sakes pitch. This issue is worth a column itself—oct month on the process month. I

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able solution that allows for multichannel customer interaction either through traditional or modern Internet methods. It can be implemented quickly and offers us the level of support we need to move forward."

Here's Exhibit B, from another vendor's Web site: "As an outsourced commerce solution provider, X enables you to tap into consumer or channel buyers on your own private-label commerce site... We offer numerous selfing formats and commerce tools to help you acquire customers and maximize yields on your inventory.

Maybe it's my public-school education, but I have trouble understanding what these vendors do. As impenetrable as this propaganda is, the greater offense is selling features as benefits. Neither example provides an explicition of how these products and services will help companies save or make money. If postievesturent mesmake money. If postievesturent messurement in the name of better selling sweeps out this rhetorical fog, we're all

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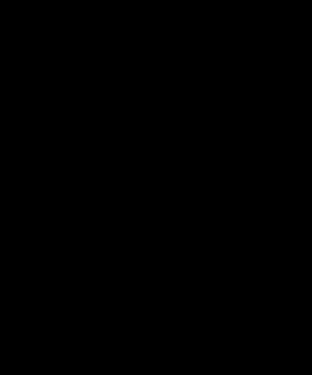
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Continued from page 1 **DaimlerChrysler**

Unger said. The Digital Factory plan comes two years after the automaker launched a similar initiative called Past Car, also based on Dassault's technology, to speed up its vehicle

design work. DaimlerChrysler began using the Digital Factory approach in February as part of a project to build a new engineufacturing plant in Koelleda. Germany, Unser said the factory designers used Dassault's Catia computer-aided design software as well as virtual manufacturing software made by Delmia, a subsidiary

of Paris-based Dassault.

Cost-Cutter The use of the tools is expected to result in reductions of roughly 30% in construction time and 10% in per-squarefoot plant floor costs at the Koelleda plant, Unger said. DaimlerChrysler is also run ning a pilot program with the software at a Mercedes-Benz

factory in Germany that's being retrofitted, Unger said. She added that the company previously implemented "a degree" of digital manufacturing planning in construction projects at two other plants in Germany and a Jeep assembly facility in Toledo, Ohio, as precursors to Digital Factory.

The possible investment range cited by Unper would cover the cost of software licenses, hardware and implementation work if Daim! Chrysler goes forward and lises the Delmin software on a worldwide basis, a company New mamowa

Wolf-Peter Seuffert, an IT manager who is heading the digital manufacturing pilot project at Mercedes-Benz, said via e-mail that the Delmia tools previously hadn't been used in application environments as complex as those in the automotive industry.

But. Seuffert said. Daimler-Chrysler officials "are 100% sure and confident" that the software is scalable enough to meet the company's needs. which include managing 500,000 production-related

data records for its Mercedes-Benz S-Class cars alone. The Digital Factory strategy is similar to design automation efforts that are being undertaken by other major automak ers, including General Motors Corp., Ford Motor Co. and Toyota Motor Corp., said lack Maynard, an analyst at Ab-

erdeen Group Inc. in Boston. "They're all trying to do a lot more in working on designs in electronic form, where it's cheaper to make changes, before they start bending metal," Maynard said. "It's expensive to do, but it works out to be little on a dollar-per-car basis."

Unger said that Daimlet Chrysler also expects Digital Factory to produce improvements in vehicle quality and production workflows. For example, the virtual manufacturing tools should help production engineers determine before manufacturing starts

whether a specific part will fit into a vehicle as planned. Unger said. That could minimize the need for expensive rework once manufacturing has begun, she noted.

SAFETY FIRST

DairelarChrysler a also meeting in solely related factorology for its cars:

Budget Cuts, Other Problems Hamper App Integration Efforts

IT forced to put EAI initiatives on hold

NTERPRISE application integration (EAI) was on the to-do lists of many IT organiza-

this year. But like other capital-intensive projects, EAL efforts are falling victim to the tightening bud-

get nooses at some companies. IT departments have been forced to postpone integration projects aimed at streamlining corporate data workflows and automating ties to customers and suppliers, according to a half-dozen IT managers inter-

viewed last month. "We went into [2002] with big integratino plans, but budget cuts have put this on hold for now," said an IT manager at a large New York-based in-

Imvesting \$2 7 million to integrate applications without a definable business problem just isn't happening. KAREN PURSON, SENOR DIRECT

TOR OF STRATEGIC MARKETING.

unless clear business needs are identified vestment bank who requested anonymity. "We're just starting to explore this now." The investment bank is currently evaluating core busi-

ness systems that might benefit from additional integration, including the synchronization of disparate commercial banking systems that have been added

rough recent acquisitions. the IT manager said. The problem for many budget-constrained IT departments is that "investing \$2 million to integrate applications without a definable business problem just isn't happening," said Karen Pursch. senior director of strategic marketing at Dublin, Calif. based Sybase Inc., which re-

cently hosted an integration seminar for corporate users in New York But some companies that have managed to identify clear business needs said they're leveraging EAI initiatives to generate strong financial and

productivity gains. FAI "has been a big radar item for us over the past 12 to the months and will continue to be for the next 12 to 18 months," said Charles Irsch, CIO at Centex Homes, an operating unit of Centex Corp., a Dallas-based home builder with annual revenue of about

CR Million Centex Homes has found that if it can move information more quickly and efficiently between various systems, "it can make our people more productive," Irsch said. Earlier this year, Center used IBM's MOSeries middleware and Sybase's e-Biz Integrator and Adapter tools to help integrate its procuren system with its accounting

and general ledger systems. The effort, which took about four months, eliminated much of the manual rework once handled by Centex's accounting stuff. Irsch said. That has resulted in a 30% productivity gain for those workers, he added. Irrich de clined to say bow much the project cost.

Dealing With Diversity But EAI hasn't come together quite so easily at New Yorkhaved Avon Products Inc., a \$6 billion maker of beauty roducts that does business in 143 countries, Avon CIO Harriet Edelman said the compamy is trying "to find the sweet spot" of globally intepreting its business operations while preserving the entrepreneurial capabilities of its local units. "Our application portfolio

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reflects our business diversity," Edelman said. "We're really in the stages of standardizing and bringing down the number of applications we have, and we're beginning to tackle the challenges of application integration. Nora Swimm, executive director of the information ser-

vices unit at PIM Interconnection LLC, said the Valley Forge, Pa-based wholesale electricity market operator has opted to take an incremen tal path with EAI tools such as

"We have a partially implemented FAI solution where we're using vendor tools to partially integrate applications within our environment." Swimm said. "We don't subscribe to a big-bang approach due to the risks involved with that." Still, Swimm said. EAI spending accounts for about 15% of PIM's total IT budget

FRANK HAVES . FRANKLY SPEAKING

Your Real Customers

T'S THAT TIME OF YEAR AGAIN. Time to join the busy shoppers elbowing their way through the crowds at a local mall. Time to watch hundreds or thousands of people moving in all directions, each one taking a different path through the chaos. It's noisy, messy and about as far as you can get from the logical, orderly way we like to think about IT.

Pay attention to these people. They're real customers. What they're buying are real products. What they're doing is real business.

If that sounds obvious, good - it should be. Now back up and think about what most corporate IT shops mean by the words customers and products and business.

We call our users customers. We call the systems we put in their hands products. We call our arguments for building those products a

And we're kidding ourselves. Real customers have choices. Our users een-

erally don't. Real products have to compete for customers in the marketolace. Our systems don't And the closest we come to doing real busi-

ness - that messy, chaotic process of real customers buying real products - is juggling numbers to demonstrate that we'll cut costs. That means our "customers" are pretty much stuck with the "products" we give them once

our "business case" is approved. In other words, our "customers" aren't customers, our "products" aren't products and our "business" isn't about business OK, so we know we're not out there in the

marketplace. We know these are really just buzzwords - some IT min's idea of how to make us think about improving our relationship with our users. By calling them customers. we're supposed to recognize that we should deliver products that meet

And by calling what we do business, we're supposed to remember that what should matter most for corporate IT isn't building pretty technology, but helping to put money in the bank

And maybe that's what this terminology did - once. But the risk is that, over time, we've turned these Our users aren't customers who

can go somewhere else if they're

not satisfied with the products they get, so we don't actually have to hustle to keep their business. But because we call them customers, it's easy to slip into thinking that our real customers - the people who buy our companies'

products, the people who actually pay the bills - are in the same position. They're not Real customers don't have to put up with

halfhearted effort and just-good-enough quality. like our users do. If IT's products are late or lame, our users make do. If our companies' products aren't so good, real customers go somewhere else. And everything those real customers buy de-

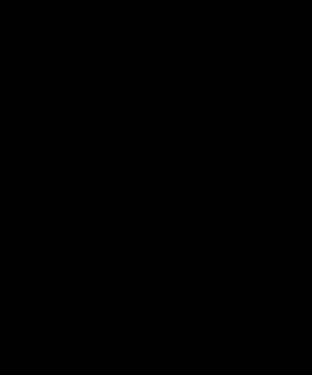
pends on the IT shop and the systems we create and maintain - from supply chain and logistics systems for building and delivering the goods, to sales and marketing support and customer relationship management systems for persuading customers to buy, to point-of-sale systems for collecting the money that ultimately shows up in our paychecks. Like it or not, everything we do has an impact

on those swarming shoppers. The more effective the systems we create, the more likely we'll get a piece of that shopping mall action. These are our real customers. Yes, users are important - but they're not the

> real reason for being here had better be real business, real products and real customers. So take a good long look at that shopping mail crowd, and remember who the real, ultimate focus of

corporate IT is. And then wade on into the crowd. If you thought finding a Tickle Me Elmo a few years ago was tough, wait till you try to lay hands on a Chicken Dance Elmo this time around &





FRANK HAYES . FRANKLY SPEAKING

Your Real Customers

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Pay attention to these people. They're real customers. What they're buying are real products. What they're doing is real business.

If that sounds obvious, good — it should be. Now back up and think about what most corporate IT shops mean by the words customers and products and business.

We call our users customers. We call the systems we put in their hands products. We call our arguments for building those products a

And we're kidding ourselves. Real customers have choices. Our users gen-

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Real products have to compete for customers

in the marketplace. Our systems don't.

And the closest we come to doing real business — that messy, chaotic process of real customers buying real products — is juggling numbers to demonstrate that we'll cut costs.

That means our "customers" are pretty much stuck with the "products" we give them once our "business case" is approved. In other words, our "customers" aren't customers, our "products" aren't products and our "business" isn't about business.

OK, so we know we're not out there in the marketplace. We know these are really just buzzwords – some IT guru's ide of how to make us think about improving our relationship with our users. By calling them customers, we're supposed to recognize that we should deliver products that meet

their needs.

And by calling what we do business, we're supposed to remember that what should matter most for corporate IT isn't building pretty technology, but helping to put money in the bank.

And maybe that's what this terminology did — once. But the risk is that, over time, we've turned these ideas inside out.

Our users aren't customers who can go somewhere else if they're not satisfied with the products they get, so we don't actually have to bustle to keep their business. But because we call them customers, it's easy to slip into thinking that our real customers—the people who buy our companies' products, the people who actually pay the bills are in the same position.

They're not.

They're not.

All customers don't have to put up with halfhearted effort and just-good-enough quality, like our users do. If In's products are late or lame, our users make do. If our companies' products aren't so good, real customers go somewhere elso.

And everything those real customers buy depends on the I'i shop and the systems we create and maintain — from supply chain and logistics systems for building and delivering the goods, to sales and marketing support and customer relationship management systems for persuading customers to buy to point of-sale systems for collecting the money that ultimately shows up in our psychecks.

Like it or not, everything we do has an impact on those swarming shoppers. The more effective the systems we create, the more likely we'll get a piece of that shopping mall action. These are our real customers. Yes, users are

important — but they're not the point, not at the end of the day. Our real reason for being here had better be real business, real products and real customers.

So take a good long look at that shopping mall crowd, and remember who the real, ultimate focus of corporate IT is.

And then wade on into the crowd. If you thought finding a Tickle Me Elmo a few years ago was tough, wait till you try to lay hands on a Chicken Dance Elmo this time around 8





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